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133

## MOTOR TRANSPORT TRAFFIC STATISTICS

PROVINCE OF QUEBEC

Year ended March 31, 1957 (1956/57)



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#### INTRODUCTION

This report presents the results of the first annual survey of motor transport traffic conducted in the Province of Quebec at three month intervals during the period April 1, 1956 to March 31, 1957. This survey has been made possible through the excellent co-operation received from the trucking

industry and particularly from the officials of the Government of Quebec, in allowing the Dominion Pureau of Statistics access to motor vehicle registration records from which samples of trucks were selected each quarter.

#### General Description of the Sample

An overall sample of approximately 10 per cent of all trucks registered in Quebec was selected for the year of this survey. To allow for seasonal variations in motor transport traffic and to ensure that the sample vehicles represented current registrations in force, this annual survey was conducted in four quarterly segments with approximately 2½ per cent of total registrations sampled each quarter. Vehicles selected were coded so that a particular vehicle would not be chosen more than once during each licence year. Each quarterly segment of the survey ran for a seven day period, Sunday through Saturday.

All trucks registered in the province are represented except those not considered to be engaged in transportation services such as tow trucks, hearses, ambulances, snowmobiles, farm tractors, cranes, bulldozers, cat tracks, diggers, graders and other road building equipment, military and other government owned vehicles, taxis and passenger automobiles and those vehicles not required to obtain a Quebec licence under Section 10 of the Quebec Motor Vehicles Act. Trailers as such were excluded from the sample, but details of tractor-trailer combinations were obtained by including the power units or tractors in the survey.

While an annual sample of ten per cent of all trucks registered in the province was considered sufficient to obtain reliable statistics, greater accuracy was achieved by stratifying the sample by weight groups. This stratification was made on the basis of tare (empty) weight of the vehicles rather than gross vehicle weight as in most other provinces, because the Province of Quebec licenses motor vehicles on a tare weight basis. By stratifying the vehicles by tare weight groups, it was determined that almost 98,000 or approximately 69 per cent of the provincial total have a tare weight of 3,300 lbs, or less, whereas only about 11,000 trucks are in the "8,500 lbs. and over" class. More reliable results are obtained by concentrating higher sampling ratios among the weight groups containing the largest vehicles which engage in the most diversified type of operation, and by ensuring that each weight group contains a sufficient number of vehicles for expansion purposes. The proportion selected by weight group varied, therefore, from 6 per cent in the lowest weight group to about 24 per cent in the heaviest with the result that an overall 10 per cent ratio was made to represent approximately 20 per cent of the capacity of all vehicles registered.

Vehicles in the sample were also stratified by function or type of operation into the four categories: for hire, private intercity, private urban and private farm. For hire trucks are those operated for compensation or gain anywhere in the province according to licence; private intercity are those which are owned and operated on intercity routes by business, industry and individuals to transport their own raw materials, finished goods and merchandise; private urban vehicles are those which are operated predominantly within urban or metropolitan areas and private farm trucks are those operated by farmers primarily to transport farm produce, farm supplies or for farm service purposes. This stratification was made on the basis of the licensing system in Quebec, with a view to maintaining comparability with other provinces wherever possible.

In Quebec, trucks operated for compensation as contract or common carriers in intercity service or within a specified locality and a radius of 5 miles from the boundaries of that locality, are required to obtain an "L" licence. All privately owned vehicles engaged in intercity and/or urban operations are issued with an "F" licence. Vehicles owned and operated by farmers and used in connection with their own farm operations are classified as farm vehicles and issued with an "N" licence. It was therefore possible to select the samples for these three classes of vehicles directly from provincial numerical files of each of these licence categories.

From the above, it can be seen that the "L" licence category corresponds to the for hire or common carrier group and the "N" licence category is equivalent to the private farm class, as defined for the purposes of this report. Those vehicles with "F" licences were classified as "private urban" and "private intercity" on the basis of the predominant type of operation performed, as shown by replies to the survey questionnaire.

All vehicles in the sample were classified by gross vehicle weight groups to provide comparability with other annual provincial reports. Since Quebec licenses vehicles on a tare weight basis and as there is no direct means of converting tare weight to gross vehicle weight, the following method was used. For each truck, the gross vehicle weight was estimated from the recorded tare weight, and either the estimated carrying capacity or the weight of the heaviest load carried. The gross vehicle weight of each tractor-trailer combination was

estimated from the tare weight of the tractor, the estimated tare weight of the trailer and the weight of the heaviest load carried. It is emphasized that this

method provides only approximately equivalent gross vehicle weight groups; and therefore, exact provincial comparability cannot be assured.

#### Expansion of the Survey Results

Since each quarterly segment of the annual sample was selected at random, the final distribution by gross vehicle weight and by function was used to provide population estimates as at the time of the sample selection. The results were then expanded to represent all trucks registered in the province, as well as the operations performed during the three month period. Generally, this was achieved by multiplying the sample results by the inverse ratio of the sample to the population and by the ratio of three months to one week. Expansion on the basis of the relative size of the sample and population varied with each gross vehicle weight

group and with the breakdown of the gross sample into various categories of response. Since there are 13 weeks in a three month period, time expansion was achieved by multiplying by 13 in all cases.

The resultant expanded data for each of the four quarters were then combined to obtain provincial estimates for the twelve month period. Yearly operating averages such as average yearly mileage were calculated from the average number of vehicles registered during the twelve month period. All other operating ratios were obtained from the twelve month aggregates.

#### REVIEW OF SURVEY RESULTS

Excluding vehicles which do not perform transportation services, the average number of trucks registered in Quebec during the twelve month period ending March 31, 1957 was 142,179. Of this number, 11,929 or 8 per cent were common or for hire carriers; 32,649 or 23 per cent were private intercity trucks owned and operated by business to transport their own goods; 66,245 or 47 per cent were trucks used in urban operations; and, 31,356 or 22 per cent were farm trucks used mainly in the growing, servicing and marketing activities of the farmer.

Planks appear in a number of places in the following tables where no vehicles of certain weight classifications were selected in any of the four samples. It does not necessarily follow that there were no vehicles belonging to these classifications in operation in the province. In addition, those cells marked with an asterisk in Appendix I (Number of Questionnaires Returned Completed) contain a relatively small sample of trucks and hence statistics appearing in such classes throughout the report are not considered reliable.

Section I. The total number of miles travelled by all trucks registered in Quebec, intraprovincially, interprovincially and extraprovincially (traffic performed entirely outside the province) during the twelve month period ending March 31, 1957 amounted to 1,357 million, of which 250 million miles or 18 per cent were accumulated by for hire trucks and 459 million or 34 per cent by private intercity trucks. On the average, trucks registered in the province travelled 9,500 miles during the year and each ton of goods was carried an average distance of 30.1 miles. For hire trucks averaged 20,900 miles during the period as compared with an average of 14,100 miles for private intercity vehicles and carried goods 79 per cent of the time as against 52 per cent for private intercity trucks. For hire and private intercity trucks carried each ton of goods an average distance of 71 and 27 miles respectively.

The amount of fuel consumed by Quebec registered trucks totalled 133 million imperial gallons of gasoline and 9 million gallons of diesel oil. As there were few diesel trucks included in the survey, the estimate of the diesel oil consumption is most likely not very reliable and should, therefore, be used with caution. Miles per gallon of gasoline varied from 6.7 for common carriers to 14.1 for farm trucks. The average for all gasoline trucks amounted to 9.8 miles per gallon and for diesel trucks 6.4 miles per gallon.

The total volume of goods transported by all trucks registered in the province amounted to 106 million short tons. Farm trucks carried 2.7 million tons or 3 per cent of the total; private urban trucks transported 42.2 million tons or 40 per cent; private intercity trucks 37.5 million tons or 35 per cent and for hire carriers transported 23.9 million tons or 22 per cent of the total volume. Ton miles performed aggregated 3,202 million, an average of 22,500 ton miles per vehicle.

Total capacity ton miles for all motor vehicles amounted to 6,785 million, an average of 47,700 capacity ton miles per vehicle. The percentage of capacity utilized was 47.2 for all trucks and 61.4 per cent for the for hire vehicles. Gross ton miles aggregated 7,655 million, an average of 53,800 gross ton miles per vehicle.

The total amount of revenue received by common or for hire carriers for all types of service amounted to 136 million dollars or 11,400 dollars per vehicle. Revenue per ton mile was 8.0 cents whereas revenue per total mile amounted to 54.5 cents.

Section II. This series presents the total amount of traffic performed by Quebec registered trucks within the boundaries of the province. In addition to the intraprovincial traffic, it includes that portion of interprovincial and international traffic which was performed on Quebec streets and highways.

The total number of miles operated by Quebec registered vehicles within the province amounted to 1,269 million compared with the grand total of 1,357 million miles operated both inside and outside the province. The yearly mileage per truck averaged 8,900 miles as against 9,500.

The total volume of goods carried in Quebec amounted to 105.6 million tons. Ton miles totalled 2,353 million compared with 3,202 million inside and outside the province, while average ton miles per vehicle was 16,600 as opposed to 22,500. The average weight carried per vehicle amounted to 3.3 tons compared with 4.1 tons and each ton of goods was carried an average distance of 22.3 miles within the province as against 30.1 miles.

Total revenue received by common carriers for the transportation of goods on Quebec streets and highways amounted to 92.8 million dollars, an average of 7,800 dollars per vehicle and 9.9 cents per ton mile.

Section III. The total volume of goods transported by Quebec registered trucks engaged in interprovincial and international service is estimated at 4,268,000 tons, of which 2,640,000 tons or almost 62 per cent was transported by for hire or common carriers. Of a total of 2,653,000 tons carried out of Quebec, 2,170,000 tons or 82 per cent were destined to Ontario and 405,000 tons or 15 per cent were transported to the United States. The majority of goods brought into Quebec originated in the same areas.

Table 14 shows interprovincial and international traffic by gross vehicle weight groups and by class of carrier. Of total traffic amounting to 982 million ton miles, almost 82 per cent was performed

by for hire carriers, with nearly 77 per cent of the total traffic performed by trucks with a gross vehicle weight of over 45,000 pounds. The average load carried by for hire trucks was 13 tons compared to 10 tons by private vehicles, while the average distance per trip was 294 miles versus 94 miles.

Commodities carried by vehicles engaged in interprovincial and international traffic are shown in table 15. The total volume of goods transported by for hire carriers was 2,640,000 tons, with each ton transported an average distance of 307 miles. Total revenue received amounted to 48.5 million dollars at an average rate of  $\epsilon$ .0 cents per ton mile. Manufactures and miscellaneous items amounting to 1,498,000 tons were the chief commodities transported by for hire carriers, for which revenue of 25.3 million dollars was received.

Private vehicles engaged in interprovincial and international service transported 1,628,000 tons of goods, of which 549,000 tons or 34 per cent were forest products and 482,000 tons or 30 per cent were manufactures and miscellaneous items.

Appendix: The appendix to this report provides an analysis of the sampling response as well as the estimated average Quebec truck population for the year. Over the twelve month period ending March 31, 1957, survey questionnaires were sent to the owners or operators of 17,264 motor vehicles. Of this total 8,540 questionnaires were returned completed and 3,842 vehicles were reported not used during the survey week. In addition, 2,698 questionnaires were returned with insufficient information and were therefore unusable. Non response to the survey totalled 2,184 or 13 per cent.

Section I. Motor Truck Traffic Performed by Quebec Registered Trucks Inside and Outside the Province
April 1, 1956 - March 31, 1957
TABLE 1. Total Mileage Travelled

			Gross	vehicle weight a	groups				
Type of operation <sup>1</sup>	0-2½ tons 0-5,000 lbs.	2½-5 tons 5,001-10,000 lbs.	5-7½ tons 10,001-15,000 lbs.	7½-10 tons 15,001-20,000 lbs.	10-15 tons 20,001-30,000 lbs.	Over 15 tons 30,001 lbs. and over	Total		
			Tota	al mileage trave	lled				
				'000					
For hire	1,363	24,562	21,276	19,174	40,629	142,867	249,871		
Intercity	84,039 122,727 72,520	133,233 241,164 64,116	34,641 46,418 7,105	33,754 29,869 1,767	66,209 30,330 82	107, 195 32, 184 68	459,071 502,692 145,658		
Total	280, 649	463,075	109, 440	84,564	137, 250	282,314	1,357,292		
	Average yearly mileage per truck								
For hire	5,400	11,800	10,600	12,800	17, 100	38,400	20,900		
Private: Intercity Urban Farm	12,300 7,300 4,700	11,900 7,700 4,600	11,200 6,400 4,100	14,000 7,500 4,900	14,800 7,800 1,700	23, 200 10, 700 11, 300	14, 100 7, 600 4, 600		
Total	7, 100	7, 900	7, 800	10,300	12,700	24, 800	9, 500		
	Average journey (Average distance each ton of goods was carried)								
For hire	20.3	19.0	21.1	26.5	28.4	99.1	71.0		
Intercity	28.9 15.0 13.7	28. 1 13. 6 13. 9	22.0 10.2 14.3	33.0 10.8 24.8	21. 1 10. 2 5. 6	29.9 9.9 21.0	27.2 10.6 14.6		
Total	17.7	16.8	15.0	19. 6	18. 7	42.1	30. 1		
	Percentage of total mileage travelled empty								
For hire	46.6	24.3	24.7	25.2	30.4	17.3	21.5		
Intercity	59.5 53.1 71.0	53.0 37.1 70.5	37.0 26.5 54.9	34.5 29.2 45.5	39.9 29.6 47.3	43.8 35.7 52.3	47.6 39.0 69.7		
Total	5 9. 6	45.6	31.3	30.7	34.8	29.5	42.0		

<sup>1.</sup> For hire trucks — operated for compensation or gain anywhere in the province according to licence. Private — Intercity trucks — owned and operated on intercity routes by business, industry and individuals to transport their own raw materials, finished goods and merchandise. Private — Urban trucks — operated primarily within urban areas (including some for hire vehicles.) Private — Farm trucks — owned and operated by farmers primarily to transport farm produce, farm supplies or for service purposes.

Section I. Motor Truck Traffic Performed by Quebec Registered Trucks Inside and Outside the Province
April 1, 1956 — March 31, 1957
TABLE 2. Total Fuel Consumption

	Gross vehicle weight groups							
Type of operation	0-2½ tons	2½-5 tons	5-7½ tons	7½-10 tons	10-15 tons	Over 15 tons	Total	
			Total gall	lons of gasoline	consumed			
For hire	99 5, 490 8, 402 4, 790 18, 781	2, 112 10, 232 18, 945 4, 637 35, 926	2,307 3,605 4,837 673 11,422	'000 2,548 3,944 3,762 219 10,473	5,678 8,707 4,421 14 18,820	18,025 14,900 4,987 8 37,920	30,769 46,878 45,354 10,341 133,342	
			Total gall	ons of diesel oil	consumed			
For hire	-	-	-	'000 _	109	6,895	7,004	
Intercity	_			Ξ	=	1, 164 618	1, 164 618	
Total	_	-		-	169	8, 677	8, 786	

## Section I. Motor Truck Traffic Performed by Quebec Registered Trucks Inside and Outside the Province April 1, 1956 - March 31, 1957

TAPLE 2. Total Fuel Consumption - Concluded

Type of operation	Gross vehicle weight groups							
Type of operation	0-2½ tons	2½-5 tons	5-7½ tons	7½-10 tons	10-15 tons	Over 15 tons	Total	
	Miles per gallon of gasoline							
For hire Private: Intercity Urban Farm Total	13.7 15.3 14.6 15.1	11.6 13.0 12.7 13.8 12.9	9. 2 9. 6 9. 6 10. 6	7.5 8.6 7.9 8.1	7.0 7.6 6.9 6.0 7.2	5. 5 6. 7 5. 8 8. 7 6. 0	6.7 9.6 11.0 14.1 9.8	
			Miles	per gallon of die	sel oil			
For hire	- - -	-	-	-	9.3	6. 3 6. 8 5. 5	6.4 6.8 5.5	
Total	-	-		_	9.3	6.3	6.4	

# Section I. Motor Truck Traffic Performed by Quebec Registered Trucks Inside and Outside the Province April 1, 1956 — March 31, 1957

TABLE 3. Total Goods Carried and Ton Miles Performed

Type of operation			Gross	vehicle weight	groups				
Type of operation	0-2½ tons	2½-5 tons	5-7½ tons	7½-10 tons	10-15 tons	Over 15 tons	Total		
			Total	tons of goods ca	arried				
				'000	1				
For hire	12	574	1,712	1,941	4,953	14,684	23,876		
Intercity	409	1,506	2,217	2, 253	9,817	21, 272	37,474		
UrbanFarm	683 681	4,666 1,126	5,415 692	5,093 189	8,395 38	17,938	42, 190 2, 727		
Total	1,785	7, 872	10,036	9, 476	23, 203	53, 895	106, 267		
	Average weight carried  (Average weight of goods carried per one-way trip) <sup>1</sup>								
For hire	.3	. 6	2.3	3.6	5.0	12.3	8.6		
Intercity	.3	.7	2. 2	3.4	5.2	10.5	4.2		
UrbanFarm	.2	.4	1.6 3.1	2.6 4.9	4.0	8.6	1.5 .9		
Total	.3	.5	2.0	3.2	4.9	11.4	4.1		
	Total ton miles performed								
				'000					
For hire	247	10,903	36,204	51,473	140,904	1,454,955	1,694,686		
Intercity	11,829 10,245	42,335 63,324	48,830 55,293	74,232 55,212	207, 273 85, 625	635, 283 178, 226	1,019,782 447,925		
Farm	9,357	15,630	9,898	4,693	212	3	39,793		
Total	31,678	132,192	150,225	185,610	434,014	2,268,467	3,202,186		
			Avera	ge ton miles per	truck				
Man hine	1 000	F C00	10 100	04 000	E0 E00	201 200	142 100		
For hire	1,000	5,200	18, 100	34,300	59,500	391,300	142, 100		
Intercity	1,700 600	3,800 2,000	15,800 7,700	30,800 13,900	46,300 22,000	137, 200 59, 300	31,200 6,800		
Farm	600	1,100	5,700	13,000	4,400	500	1,300		
Total	800	2,300	10,700	22,500	40,200	199, 700	22,500		

<sup>1.</sup> Excludes vehicles making trips empty.

# Section I. Motor Truck Traffic Performed by Quebec Registered Trucks Inside and Outside the Province April 1, 1956 - March 31, 1957 TABLE 4. Total Truck Capacity

			Gross	vehicle weight	groups		
Type of operation	0-2½ tons	2½-5 tons	5-7½ tons	7½-10 tons	10-15 tons	Over 15 tons	Total
			Total	capacity ton mi	les <sup>1</sup>		
				'000			
For hire	1,134	35, 445	71, 782	103,008	312, 499	2, 235, 279	2, 759, 147
Intercity	71,411	174, 495	119, 851	178, 941	513,611	1,423,095	2, 481, 404
Urban	98, 268 63, 751	292, 150 87, 336	146, 205 30, 648	147, 813 13, 256	221, 827 570	442,066 711	1, 348, 329 196, 272
Total	234, 564	589, 426	368, 486	443, 018	1, 048, 507	4, 101, 151	6, 785, 152
	Average capacity ton miles per truck						
For hire	4, 500	17, 000	35, 800	68,600	131, 900	601, 200	231, 300
Intercity	10,400	15,600	38,800	74,200	114,600	307,400	76,000
Urban Farm	5,800 4,200	9, 300 6, 300	20, 300 17, 700	37, 200 36, 800	57,100 11,900	147,000 118,500	20, 400 6, 300
Total	6, 000	10, 100	26, 300	53, 700	97, 200	361, 000	47, 700
			Percent	age of capacity	ıtilized		
For hire	21.8	30.8	50.4	50.0	45. 1	65.1	61.4
Private:	16.6	24.3	40.7	41.5	40.4	44.6	41.1
Urban	10.4	21.7	37.8	37.4	38. 6	40.3	33.2
Farm	14.7	17.9	32.3	35. 4	37. 2	. 5	20.3
Total	13.5	22.4	40.8	41.9	41.4	55.3	47.2

<sup>1.</sup> Capacity ton miles are determined by multiplying the actual total number of miles travelled by the estimated capacity or the weight of the heaviest load carried, whichever is higher.

# Section I. Motor Truck Traffic Performed by Quebec Registered Trucks Inside and Outside the Province April 1, 1956 - March 31, 1957 TABLE 5. Total Gross Ton Miles Performed 1

Gross vehicle weight groups Type of operation  $2\frac{1}{2}$ 5 tons 5-71/2 tons Over 15 tons  $0-2\frac{1}{2}$  tons 7½-10 tons 10-15 tons Total Total gross ton miles 000 For hire ... 2,402 63,447 105,721 124, 535 320,920 2,464,681 3,081,706 Private: Intercity..... 164, 843 207, 591 32, 783 2, 527, 546 1, 736, 629 309, 516 142,592 313,773 201,001 486,967 1,218,370 Urban .... 545, 667 140, 886 221, 214 388, 461 401 Farm ..... 123, 179 11,671 Total ..... 470,485 1,063,773 510, 938 508, 591 1,029,697 4,071,913 7, 655, 397 Average gross ton miles per truck For hire ... 9,500 30,500 52,700 82,900 135,400 662,900 258, 300 Private: 263,100 129,100 66,900 Intercity 20,800 28, 100 53, 300 83,300 108, 700 77,400 26,200 9,900 Urban .... 17,400 10,200 12,000 28,800 56, 900 12, 400 19,000 32,400 Farm ..... 8,000 Total ..... 12,000 18, 200 36,400 61, 700 95,500 358, 400 53, 800

### Section I. Motor Truck Traffic Performed by Quebec Registered Trucks Inside and Outside the Province April 1, 1956 - March 31, 1957

TABLE 6. Total	Revenue Fro	m Operations	Performed by	v For Hire Carriers

		Gross vehicle weight groups								
	0-2½ tons	2½-5 tons	5-7½ tons	7½-10 tons	10-15 tons	Over 15 tons	Total			
Total revenue	97,000 39.3 7.1 400	5, 332, 000 48.9 21.7 2, 600	7, 208, 000 19. 9 33. 9 3, 600	8,302,000 16.1 43.3 5,500	17, 805, 000 12. 6 43. 8 7, 500	97, 398, 000 6, 7 68, 2 26, 200	136, 142, 000 8, 0 54, 5 11, 400			

<sup>1.</sup> Gross ton miles performed are determined by adding to the total ton miles performed the weight of the vehicle empty (tare) multiplied by total miles travelled.

### Section II. Motor Truck Traffic Performed by Quebec Registered Trucks Within the Province April 1, 1956 - March 31, 1957

### TABLE 7. Mileage Travelled Within the Province

			Gross	vehicle weight	groups					
Type of operation	0-2½ tons 0-5,000 lbs.	2½-5 tons 5,001-10,000 lbs.	5-7½ tons 10,001-15,000 lbs.	7½-10 tons 15,001-20,000 lbs.	10-15 tons 20,001-30,000 lbs.	Over 15 tons 30,001 lbs. and over	Total			
			Tota	al mileage trave	lled					
				'000						
Por hire	1,363	24,421	21,271	17,577	36,502	82,398	183,532			
Intercity	79,154 122,727 72,520	130,160 241,164 64,116	34,187 46,418 7,105	33,049 29,869 1,767	63,809 30,330 82	96,526 32,184 68	436,885 502,692 145,658			
Total	275, 764	459, 861	108,981	82,262	130,723	211,176	1,268,767			
		Average yearly mileage per truck								
For hire	5,400	11,700	10,600	11,700	15,400	22,200	15,400			
Private: Intercity Urban	11,500 7,300	11,600 7,700	11,100 6,400	13,700 7,500	14,200 7,800	20,800	13,400 7,600			
Total	4,700 7,000	4,600 7,900	4,100 7,800	4,900 10,000	1,700 12,100	11,300 18,600	4,600 8,900			
		(	Average distanc	Average journey e each ton of go	ods was carried)	)				
For hire	20.3	18.9	21.1	24.3	25.7	50.5	40.1			
Private: Intercity Urban	27.8 15.0	27.8 13.6	21.8 10.2	32.6 10.8	20.4 10.2	26.2	24.9 10.6			
Total	13.7 17.5	13.9 16.7	14.3 14.9	24.8 19.0	. 5.6 17.8	21.0 27.2	14. ( 22. :			
			Percentage of	total mileage tr	avelled empty					
For hire	46.6	24.2	24.7	23.9	29.1	23.0	24.8			
Private: Intercity Urban	60.2 53.1	52.6 37.1	37.0 26.5	34.5 29.2	39.7 29.6	43.7 35.7	47. 39.			
Farm	71.0 59.8	70.5 45.5	54.9 31.3	45.5 30.6	47.3 34.4	52.3 34.4	69.7 <b>43.</b> 4			

# Section II. Motor Truck Traffic Performed by Quebec Registered Trucks Within the Province April 1, 1956 – March 31, 1957 TABLE 8, Fuel Consumption Within the Province

	TABLE	8. Fuel Cons	umption with	in the Provinc	:e				
Type of operation	Gross vehicle weight groups								
Type or operation	0-2½ tons	2½-5 tons	5-7½ tons	7½-10 tons	10-15 tons	Over 15 tons	Total		
			Total gall	ons of gasoline	consumed				
				'000					
For hire	99	2,081	2,307	2,339	4,992	11,758	23,576		
Private: Intercity Urban Farm	5,116 8,402 4,790	10,009 18,945 4,637	3,556 4,837 673	3,878 3,762 219	8,426 4,421 14	13,684 4,987 8	44,669 45,354 10,341		
Total	18,407	35,672	11,373	10,198	17,853	30, 437	123,940		
	Total gallons of diesel oil consumed								
ļ	<del></del>			'000					
For hire	_	_	· _ ·	-	109	2,464	2,573		
Private: Intercity Urban	_	_	_	Ξ	_	827 618	827 618		
Farm	Ξ	_	=	-	-	-			
Total		_	- 1		109	3, 909	4,018		

# Section II. Motor Truck Traffic Performed by Quebec Registered Trucks Within the Province April 1, 1956 - March 31, 1957

TABLE 8. Fuel Consumption Within the Province - Concluded

	Gross vehicle weight groups								
Type of operation	0-2½ tons	2½-5 tons	5-7½ tons	7½-10 tons	10-15 tons	Over 15 tons	Total		
		•	Miles	per gallon of gas	oline				
For hire	13.7	11.7	9.2	7.5	7.1	5.7	7. 1		
Private: Intercity Urban Farm	15.5 14.6 15.1	13.0 12.7 13.8	9.6 9.6 10.6	8.5 7.9 8.1	7.6 6.9 6.0	6.7 5.8 8.7	9.7 11.0 14.1		
Total	15.0	12.9	9.6	8.1	7.3	6.1	10.0		
			Miles	oer gallon of die	sel oil				
For hire	_	_	_	_	9.3	6.2	6.3		
Private: Intercity Urban	Ξ	_	_	Ξ	Ξ	6.6 5.5	6.6 5.5		
Total	_	_	_	_	9.3	6.1	6. 2		

### Section II. Motor Truck Traffic Performed by Quebec Registered Trucks Within the Province April 1, 1956 - March 31, 1957

TABLE 9. Goods Carried and Ton Miles Performed Within the Province

			Gross	vehicle weight	groups						
Type of operation	0-2½ tons	2½-5 tons	5-7½ tons	7½-10 tons	10-15 tons	Over 15 tons	Total				
	Total tons of goods carried										
	'000										
For hire	12	574	1,712	1,937	4,942	14,130	23,307				
Intercity	406 683 681	1,505 4,666 1,126	2,217 5,415 692	2,244 5,093 189	9,789 8,395 38	21,224 17,938	37,385 42,190 2,727				
Total	1,782	7,871	10,036	9,463	23,164	53, 293	105,609				
	Average weight carried  (Average weight of goods carried per one-way trip) 1										
For hire	.3	.6	2.3	3.5	4.9	11.3	6.8				
Private:	.4	.7	2.2	3.4	5.2	10.2	4.1				
UrbanFarm	.2	.4	1.6	2.6 4.9	4.0 4.9	8.6	1.5				
Total	.3	.5	2.0	3.2	4.8	10.5	3.3				
	Total ton miles performed										
				'000							
For hire	247	10,849	36,197	47,046	126,842	714, 176	935,357				
Intercity	11,282 10,245 9,357	41,834 63,324 15,630	48,236 55,293 9,898	73,053 55,212 4,693	199,540 85,625 212	556,461 178,226 3	930,406 447,925 39,793				
Total	31,131	131,637	149,624	180,004	412,219	1,448,866	2, 353, 481				
	-		Avera	ge ton miles per	rtruck						
For hire	1,000	5,200	18,100	31,300	53,500	192, 100	78,400				
Private: Intercity Urban Farm	1,600 600 600	3,700 2,000 1,100	15,600 7,700 5,700	30,300 13,900 13,000	44,500 22,000	120,200 59,300	28,500 6,800				
Total	800	2,300	10,700	21,800	4,400 38,200	500 127, 500	1,300 16,600				

<sup>1.</sup> Excludes vehicles making trips empty.

### Section II. Motor Truck Traffic Performed by Quebec Registered Trucks Within the Province April 1, 1956 - March 31, 1957

TABLE 10. Truck Capacity Within the Province

Type of operation	Gross vehicle weight groups										
Type of operation	0 - 2½ tons	2½ - 5 tons	5-7½ tons	7½-10 tons	10 - 15 tons	Over 15 tons	Total				
			Tota	l capacity ton mi	les <sup>1</sup>						
				'000							
For hire	1,134	35, 248	71,760	94,320	280,414	1,233,397	1,716,273				
Urban	67, 193 98, 268 63, 751	171,088 292,150	118, 140 146, 205	175, 625 147, 813	494,399 221,827	1,266,879 442,066	2, 293, 324 1, 348, 329				
Farm		87,336	30,648	13, 256	570	711	196, 272				
Total	230, 346	585, 822	366, 753	431,014	997,210	2, 943, 053	5, 554, 198				
	Average capacity ton miles per truck										
For hire	4, 500	16,900	35,800	62,800	118,300	331,700	143,900				
Intercity Urban Farm	9,800 5,800 4,200	15,300 9,300 6,300	38, 200 20, 300 17, 700	72,800 37,200 36,800	110,300 57,100 11,900	273,600 147,000 118,500	70,200 20,400 6,300				
Total	5, 900	10,000	26, 200	52,300	92,400	259,000	39,100				
	Percentage of capacity utilized										
For hire	21.8	30.8	50.4	49.9	45. 2	57.9	54.5				
Intercity Urban	16.8 10.4	24.5 21.7	40.8 37.8	41.6 37.4	40.4 38.6	43.9 40.3	40.6 33.2				
Farm	14.7	17.9	32.3	35.4	37.2	.5	20.3				
Total	13.5	22.5	40.8	41.8	41.3	49.2	42.4				

<sup>1.</sup> Capacity ton miles are determined by multiplying the actual number of miles travelled within the province by the estimated capacity or the weight of the heaviest load carried, whichever is higher.

#### Section II. Motor Truck Traffic Performed by Quebec Registered Trucks Within the Province April 1, 1956 - March 31, 1957

TABLE 11. Gross Ton Miles Performed Within the Province<sup>1</sup>

Private:         134,504         307,410         162,672         197,200         468,911         1,078,674         2,349,179           Urban         202,312         545,667         207,591         171,384         221,214         388,461         1,736,674           Farm         123,179         140,886         32,783         11,671         596         401         309,401           Total         462,397         1,057,067         508,740         494,729         975,735         2,727,886         6,226,300           Average gross ton miles per truck           For hire         9,500         30,300         52,700         76,200         120,300         339,000         153,800           Private:         19,600         27,500         52,600         81,800         104,600         233,000         72,600													
Total gross ton miles   Total gross ton gross ton gross ton miles   Total gross ton gros	Type of operation	Gross vehicle weight groups											
For hire 2, 402 63, 104 105, 694 114, 474 285, 014 1, 260, 350 1, 831, 014 105, 694 114, 474 285, 014 1, 260, 350 1, 831, 014 105, 694 114, 474 285, 014 1, 260, 350 1, 831, 014 105, 694 114, 474 285, 014 1, 260, 350 1, 831, 014 105, 694 114, 474 285, 014 1, 260, 350 1, 831, 014, 014, 014 114, 015, 014 114, 015, 014 114, 015, 014 114, 015, 014 114, 015, 014 114, 015, 014 114, 015, 014 114, 015, 014 114, 015, 014 114, 015, 014 114, 015, 014 114, 015, 014 114, 015, 014 114, 015, 014 114, 015, 014 114, 015, 015, 015, 015, 015, 015, 015, 015		0 - 2½ tons	2½ - 5 tons	5-7½ tons	7½ - 10 tons	10 - 15 tons	Over 15 tons	Total					
For hire 2, 402 63, 104 105, 694 114, 474 285, 014 1, 260, 350 1, 831, 104 105, 694 114, 474 285, 014 1, 260, 350 1, 831, 104 105, 694 114, 474 285, 014 1, 260, 350 1, 831, 105, 105, 105, 105, 105, 105, 105, 10		Total gross ton miles											
Private:         134,504         307,410         162,672         197,200         468,911         1,078,674         2,349,179           Urban         202,312         545,667         207,591         171,384         221,214         388,461         1,736,674           Farm         123,179         140,886         32,783         11,671         596         401         309,401           Total         462,397         1,057,067         508,740         494,729         975,735         2,727,886         6,226,300           Average gross ton miles per truck           For hire         9,500         30,300         52,700         76,200         120,300         339,000         153,800           Private:         19,600         27,500         52,600         81,800         104,600         233,000         72,600					'000								
Intercity		2, 402	63,104	105,694	114, 474	285,014	1,260,350	1,831,038					
Farm 123, 179 140, 886 32, 783 11, 671 596 401 309, Total 462, 397 1,057,067 508, 740 494, 729 975, 735 2, 727, 886 6, 226, Average gross ton miles per truck  For hire 9,500 30,300 52,700 76,200 120,300 339,000 153, Private: Intercity 19,600 27,500 52,600 81,800 104,600 233,000 72,000 120,000	Intercity							2,349,371 1,736,629					
Average gross ton miles per truck  For hire								309,516					
For hire	Total	462,397	1,057,067	508,740	494,729	975, 735	2,727,886	6, 226, 554					
Private: 19,600 27,500 52,600 81,800 104,600 233,000 72,000 104,600 10		Average gross ton miles per truck											
Intercity		9,500	30,300	52,700	76, 200	120,300	339,000	153, 500					
	Intercity	12,000	17,400	28,800	43, 200	56,900	129,100	72,000 26,200 9,900					
							1	43,800					

<sup>1.</sup> Gross ton miles performed are determined by adding to the total ton miles performed the weight of vehicle empty (tare) multiplied by total miles travelled.

### Section II. Motor Truck Traffic Performed by Quebec Registered Trucks Within the Province April 1, 1956 - March 31, 1957

TABLE 12. Revenue From Operations Performed by For Hire Carriers Within the Province

Type of operation	Gross vehicle weight groups									
	0 - 2½ tons	2½-5 tons	5 - 7½ tons	7½ - 10 tons	10 - 15 tons	Over 15 tons	Total			
Total revenue \$\text{Revenue per ton mile} \text{\$\text{\$c\$}}\$\$  Revenue per mile (total mileage	97,000 39.3	5,306,000 48.9	7, 203, 000 19. 9	7,922,000 16 .8	16,364,000 12.9	55, 863, 000 7. 8	92,755,000 9.9			
travelled)	7.1	21.7 2,500	33.9 3,600	45.1 5,300	44.8 6,900	67.8 15,000	50.5 7,800			

### Section III. Motor Truck Traffic Performed by Quebec Registered Trucks Engaged in Interprovincial and International Traffic April 1, 1956-March 31, 1957

TABLE 13, Total Tons of Goods Carried Into and Out of Quebec, by Origin and Destination, by Type of Operation

Origin or Destination	For hire trucks	Private intercity trucks	All trucks
	'000 tons	'000 tons	'000 tons
To New Brunswick	28	37	65
From New Brunswick	18	10	28
To Ontario	1,199	971	2,170
From Ontario	1,121	234	1,355
To Manitoba	4	- 1	4
From Manitoba	4	-	4
To Alberta	9	-	9
From Alberta	9	-	9
To United States	91	314	405
From United States	157	62	219
Grand Total To	1,331	1,322	2, 653
From	1,309	306	1,615

### Section III. Motor Truck Traffic Performed by Quebec Registered Trucks Engaged in Interprovincial and International Traffic April 1, 1956-March 31, 1957

TABLE 14. Interprovincial and International Traffic by Gross Vehicle Weight Groups

Gross vehicle weight	For hire trucks							
	Total miles travelled with load	Total ton miles	Average weight carried	Average distance per trip				
	'000	'000	tons	miles				
20,000 lbs. or less	1,050	4,094	4	138				
20,001-25,000 lbs	618	3, 331	5	245				
5,001-30,000 lbs	2, 195	13, 249	6	232				
0,001-35,000 lbs	1,705	14,095	8	360				
5,001 - 40,000 lbs,	1,720	16, 992	10	170				
0,001-45,000 lbs	6,518	79, 527	12	299				
15,001 lbs. and over	47,676	678, 628	14	312				
Total	61,482	809, 916	13	294				
	Private intercity trucks							
	'000	'000	tons	miles				
0,000 lbs, or less	2, 237	3, 681	2	85				
20,001 - 25,000 lbs	1, 348	9,056	7	80				
5,001 - 30,000 lbs.	1,835	12,524	7	50				
0,001-35,000 lbs.	3,076	24, 067	8	89				
5,001-40,000 lbs.	2, 293	22, 413	10	13				
0,001 - 45,000 lbs.	1,375	19, 158	14	107				
5,001 lbs and over	5, 301	81, 386	15	129				
Total	17,465	172, 285						

### Section III Motor Truck Traffic Performed by Quebec Registered Trucks Engaged in Interprovincial and International Traffic April 1, 1956 — March 31, 1957

TABLE 15. Commodities Carried by Quebec Registered Trucks in Interprovincial and International Traffic

				F	or hire trucks					
	Weight of goods carried	Total miles travelled with load	Total ton miles		Average weight carried	Average distance per ton	Tota reven		Revenue per ton mile	
	'000 tons	000	*000		tons	miles	\$'00	0	¢	
Agricultural products	56	1,515	22,	248	15	397		840	3.78	
Animals and animal products	135	4,630	56,	579	12	419	3	3,519	6.22	
Mine products	52	768	12,	366	16	238		509	4.12	
Forest products	33	500	5,6	697	11	172		297	5. 21	
Manufactures and miscellaneous	1,498	35,001	447,	450	13	299	25	5, 311	5.66	
N.O.S. general freight	866	19,063	265,	576	14	-	18	3, 066	6.80	
Total	2,640	61,482	809,	916	13	307	48	3, 542	5. 99	
	Private intercity trucks									
	Weight of goods carried	tra	Total miles travelled with load		Total Avera ton weight miles carrie		ht dis		verage stance er ton	
	'000 tons	1	'000		'000	tons			miles	
Agricultural products		160	3,641		44,804		12		230	
Animals and animal products		53	1,352		9,718		7		183	
Mine products		295	965		8,397		9		28	
Forest products		549	2,575		24,693		10		45	
Manufactures and miscellaneous		482	7, 972		78,833		10		164	
N.O.S. general freight		89	960		5,840		6		66	
Total	1	, 628	17,465		172,285		10		106	

APPENDIX I
Sampling Results

			amping Kesuit							
			Gross	vehicle weight	groups					
Type of operation	0-2½ tons 0-5000 lbs.	2½-5 tons 5,001-10,000 lbs.	5-7½ tons 10,001-15,000 lbs.	7½-10 tons 15,001-20,000 lbs.	10-15 tons 20,001-30,000 lbs.	Over 15 tons 30,001 lbs. and over	Total			
		Estimated	average Quebec tr	uck population A	pril 1, 1956 — Ma	rch 31, 1957				
For hire	252	2, 082	2,005	1,502	2, 370	3, 718	11,929			
Intercity Urban Farm	6,858 16,830 15,336	11,178 31,346 13,878	3,090 7,202 1,728	2,412 3,971 360	4,481 3,888 48	4,630 3,008 6	32,649 66,245 31,356			
Total	39, 276	58, 484	14, 025	8, 245	10, 787	11, 362	142, 179			
			Total number	of trucks select	ed in samples					
For hire	13	224	318	235	493	889	2, 172			
Intercity Urban Farm	378 924 847	1, 214 3, 409 1, 515	497 1,170 285	369 622 58	986 967 16	1, 039 794 2	4,483 7,886 2,723			
Total	2, 162	6, 362	2, 270	1, 284	2, 462	2, 724	17, 264			
	Number of questionnaires returned completed									
For hire	6*	115	153	121	262	478	1, 135			
Intercity Urban Farm	194 473 442	624 1,750 778	216 499 115	174 298 21	475 480 3*	504 358 1*	2, 187 3, 858 1, 360			
Total	1, 115	3,267	983	614	1, 220	1, 341	8, 540			
		Numbe	r of sampled truck	s reported not in	use during surve	y week				
For hire	1	32	71	49	89	167	409			
Intercity Urban Farm	70 173 179	219 620 366	140 333 93	93 161 19	256 240 5	261 205	1,039 1,732 662			
Total	423	1,237	637	322	590	633	3, 842			
		Nui	mber of questionna	aires returned inc	omplete and unus	able				
For hire	5	41	44	25	57	93	265			
Intercity Urban Farm	73 178 155	223 622 225	80 190 45	55 89 10	136 129 3	129 91	696 1,299 438			
Total	411	4, 111	359	179	3 25	313	2, 698			
		N	umber of question	naires not returne	d (non-responden	ts)				
For hire	1	36	50	40	85	151	363			
Intercity Urban Farm	41 100 71	148 417 146	61 148 32	47 74 8	119 118 5	145 140 1	561 997 263			
Total	213	747	291	169	327	437	2, 184			

<sup>\*</sup> Statistics appearing in these cells throughout the report are not considered reliable.

Canada, Statistics, Bureau of

CATALOGUE No. 53-209
ANNUAL



# MOTOR TRANSPORT TRAFFIC STATISTICS

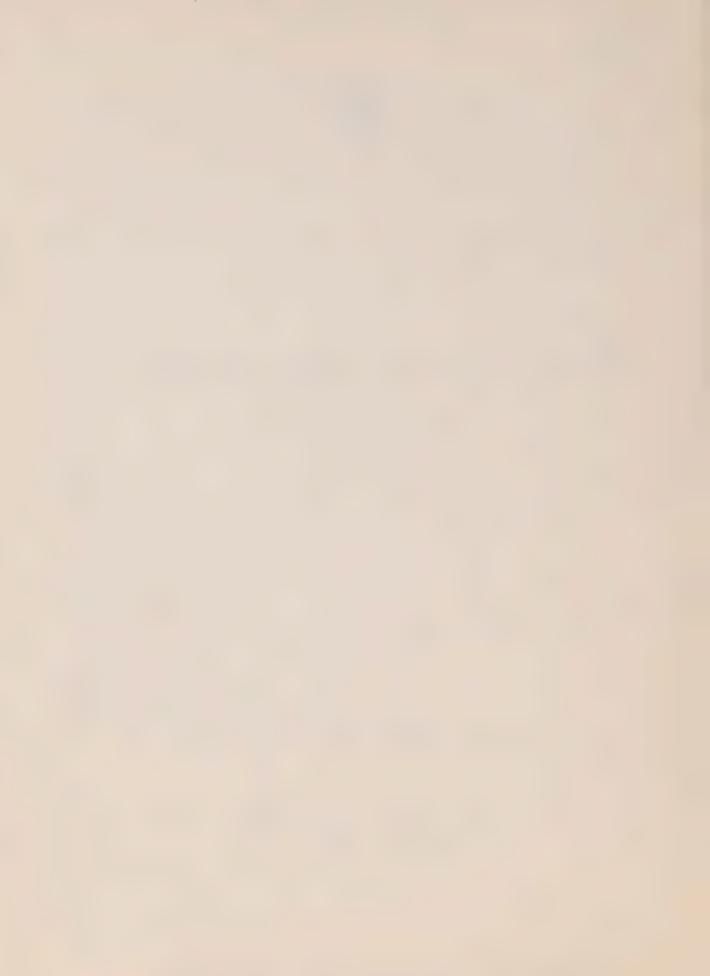
PROVINCE OF QUEBEC 1957

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### DOMINION BUREAU OF STATISTICS

Public Finance and Transportation Division

Transportation and Public Utilities Section



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PROVINCE OF QUEBEC

JANUARY I-DECEMBER 31, 1957

CHART-I TRUCK REGISTRATIONS BY TYPE OF OPERATION

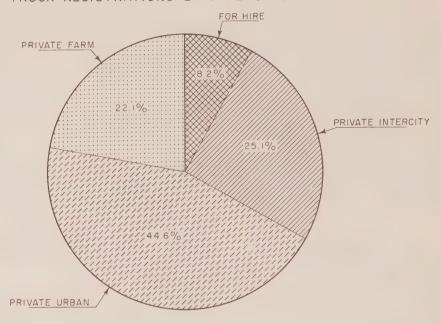
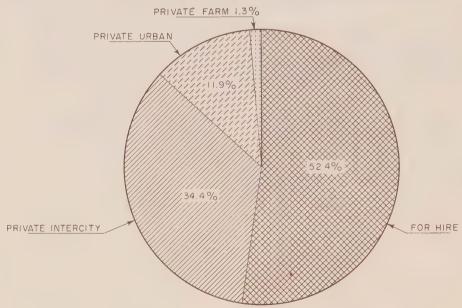


CHART-2 NET TON MILES BY TYPE OF OPERATION



### INTRODUCTION

#### Methods followed in Survey

The 1957 annual survey of motor transport traffic in the Province of Quebec is based upon a sample of approximately 12 per cent of trucks registered in the province. To allow for seasonal variations in traffic and to ensure that the selected vehicles represented current registrations in force, the survey was conducted in four quarterly segments with approximately one-fourth of the total sample selected each quarter. Vehicles selected were coded so that a particular vehicle would not be chosen more than once during each licence year. Each quarterly segment of the survey was conducted for a seven day period, Sunday through Saturday.

All trucks registered in the province are included with the following exceptions: (a) those not engaged in transportation services; and (b) military and other government owned vehicles. Trailers as such were excluded from the sample, but details of tractor-trailer combinations were obtained by including the power units or tractors in the survey.

Vehicles in the sample are stratified by function or type of operation and by gross vehicle weight groups. The four functional categories used are: for-hire, private intercity, private urban and private farm. For-hire trucks are those operated for compensation or gain anywhere in the province according to licence; private intercity vehicles are those owned and operated by firms and individuals on intercity routes to transport their own goods; private urban vehicles are those which are operated predominantly within urban or metropolitan areas; and private farm trucks are those operated by farmers primarily to transport farm produce and supplies.

In Quebec, trucks operated for compensation as contract or common carriers in intercity service or within a specified locality and a radius of 5 miles from the boundary thereof, are required to obtain an "L" licence. Vehicles owned by farmers and used in connection with their own farm operated

ations are classified as farm vehicles and issued with an "N" licence. All privately owned vehicles engaged in intercity and/or urban operations are issued with an "F" licence. Vehicles in the sample, therefore, were classified into the four functional categories on the following basis:

For-hire - "L" licensed vehicles.

Private-intercity—"F" licensed vehicles operated predominantly outside urban areas.

Private-urban - "F" licensed vehicles operated predominantly within urban areas.

Private-farm -"N" licensed vehicles.

Some "F" licensed vehicles are operated for compensation but were not included in the for-hire category. The number of such vehicles was not known and a reliable estimate was not obtained on the basis of replies to the survey questionnaire. As a result, the data shown throughout this report as "For-hire" is understated and that for "Private intercity" and "Private urban" is overstated by the extent of these for-hire vehicles with "F" licences.

Since Quebec licenses motor vehicles on a tare weight basis it was necessary to estimate equivalent gross vehicle weights to provide comparability with other annual provincial reports. For each truck in the sample the gross vehicle weight was estimated from the recorded tare weight and either the estimated carrying capacity or the weight of the heaviest load carried. The gross vehicle weight of each tractor-trailer combination was estimated from the tare weight of the tractor. the estimated tare weight of the trailer plus the weight of the heaviest load carried. It is emphasized that this method provides only approximately equivalent gross vehicle weights and therefore exact provincial comparability of the weight group classification cannot be assured.

### **Expansion of Survey Results**

The distribution of sample vehicles by gross vehicle weight groups and by function was used to provide population estimates as at the time of the sample selection. Sample results were then expanded to represent the operations of all trucks registered in the province by multiplying the sample results by the inverse ratio of the sample to the population and by the ratio of three months to one week.

The expanded data for each of the four quarterly segments were added together to obtain annual provincial estimates. Yearly operating averages such as average yearly mileage were calculated from the average number of vehicles registered during the twelve month period. All other operating ratios were obtained from the twelve month aggregates.

#### Response

During the year survey questionnaires were sent to the owners or operators of 17,060 motor vehicles. Of this number 8,388 were returned completed and 3,920 vehicles were reported not used

during the survey week. In addition 3,025 questionnaires were returned with insufficient information and were therefore unusable. Non response to the survey totalled 1,727 or 10.1 per cent.

#### **Review of Survey Results**

Excluding vehicles that do not perform transportation services, the average number of trucks registered in Quebec during the year was 147,075. Of these 12,081 or 8.2 per cent were common or for-hire carriers; 36,895 or 25.1 per cent were private intercity vehicles; 65,564 or 44.6 per cent were private trucks operating predominantly within urban areas; and 32,535 or 22.1 per cent were private farm trucks.

In the tables presented, blanks appear in a number of weight classifications where no vehicles were chosen in any of the quarterly sample selections. It does not follow that there are no vehicles in the province belonging to these classifications.

#### Section 1: Traffic Inside and Outside the Province

Section 1 contains estimates of total traffic performed by all Quebec registered trucks both inside and outside the province.

From the data presented in this section it may be observed that although for-hire vehicles were only 8.2 per cent of all trucks registered in Quebec, they accounted for 52.4 per cent of the total net ton miles performed during 1957. This results not only from the comparatively high average yearly mileage of for-hire trucks operating inside and outside of Quebec (21,500 as opposed to an average of 9.100 miles for all trucks) but also from the heavier average load carried (8.4 tons as compared with an average of 4.2 tons for all trucks). The heavier loads carried by for-hire trucks is to be expected since, as revealed in the appendix, nearly one-third of these vehicles have a gross vehicle weight of over 15 tons whereas only six per cent of all other classes combined are in this upper weight group. The predominance of heavier vehicles in the for-hire class also explains the low miles per gallon of gasoline ratio of 6.7 as compared with a ratio of 9.6 for all vehicles.

#### Section 2: Traffic Within the Province

This section presents estimates of traffic performed by Quebec registered trucks entirely inside the province excluding the "outside the province" portion of interprovincial and inter-

national traffic as well as a small amount of traffic performed entirely outside the province. Comparing the data presented in Section 1 and Section 2, it is apparent that for-hire vehicles accumulated about 40 per cent and private intercity about 7 per cent of their total net ton miles outside of Quebec.

#### Section 3: Intraprovincial Traffic

This section includes estimates of for-hire and private intercity operations originating and terminating entirely inside the boundaries of Quebec. It is significant to note that vehicles of over 15 tons accounted for 78.4 per cent of the total net ton miles performed by for-hire trucks and 58.0 per cent of the total performed by private intercity trucks in intraprovincial traffic. Of the total net ton miles performed by both for-hire and private intercity trucks, manufactured products accounted for 41.3 per cent.

### Section 4: Interprovincial and International Traffic

Statistics of traffic performed by for-hire and private intercity trucks between Quebec and other provinces and the United States are included in this section. However, these interprovincial and international tables exclude traffic performed by Quebec registered road tractors which deliver their trailers within the province to border points for transfer to other tractors which, in turn, transport them through an adjoining province or state. On the present basis of sampling motor transport traffic, comparatively few Guebec registered trucks engaging in interprovincial and international traffic are included in these surveys and as a result wholly reliable estimates of such traffic have not been obtained. Hence the data in this section of the report should be used with considerable caution.

These estimates indicate with some reasonableness, however, that well over four-fifths of the total tons of goods carried by Quebec registered trucks in interprovincial and international traffic was with Ontario; and, that over two-fifths of the total net ton miles performed and about one-third of the revenue earned by for-hire vehicles was in interprovincial and international operations.

### SECTION 1. TRAFFIC PERFORMED BY QUEBEC REGISTERED TRUCKS INSIDE AND OUTSIDE THE PROVINCE, JANUARY 1 - DECEMBER 31, 1957

### TABLE 1. All Trucks by Type of Operation

	For hire		Private		£0-4-3
	For fifte	Intercity	Urban	Farm	Total
*fileage:					
Total mileage travelled	259, 409 21, 500 57, 5 22, 9	479,020 13,000 23-8 46-8	460, 635 7, 000 9- 5 39- 5	132, 321 4, 100 16. 4 69. 2	1, 331, 885 9, 100 27, 2 41, 9
Fuel:					
Total gallons of gasoline consumed	30, 847 6. 7 8, 245 6. 4	50, 962 9·2 1,829 6·1	40, 808 11. 2 788 6. 0 —	9,426 14-1	132, 043 9. 6 10, 862 6. 3
Weight of goods carried:					
Total tons of goods carried	29,350 8.4	46, 422 4. 3	40, 232 1. 4	2,424 1.0	118, 428 4- 2
Net ton miles:					
Total net ton miles performed	1,686,934 139,600	1, 106, 833 30, 000	383, 840 5, 900	39,868 1,200	3, 217, 480 21, 900
Capacity ton miles:					
Total capacity ton miles 2	2, 885, 396 238, 800 58- 5	2, 699, 118 73, 200 41. 0	1, 230, 812 18, 800 31. 2	172, 190 5, 300 23, 2	6,987,516 47,500 46.0
Gross ton miles:					
Total gross ton miles per truck	3, 210, 240 265, 700	2, 736, 426 74, 200	1,607,373 24,500	283, 757 8, 700	7,837,796 53,300
Revenue:					
Total revenue \$'000  Revenue per ton mile \$  Revenue per mile (total mileage travelled) \$  Average revenue per truck \$	135, 170 8. 0 52. 1 11, 200		- - -	- - -	=======================================

TABLE 2: All Trucks by Gross Vehicle Weight Groups

	0-2½ tons 0-5,000 lbs.	2½-5 tons 5,001-10,000 lbs.	5-7½ tons 10,001-15,000 1bs.	7½-10 tons 15,001-20,000 lbs-	10-15 tons 20,001-30,000 lbs.	Over 15 tons 30,001 lbs. and over	Total
Mileage:							
Total mileage travelled'000 Average yearly mileage per truck Average distance each ton was carried Percentage of total mileage travelled empty	256, 917 6, 200 18. 9 62. 3	451, 227 7, 500 9. 9 43. 5	109, 291 7, 800 17. 8 30. 6	86, 418 10, 000 19. 9 30. 1	133, 235 12, 600 19, 4 36, 6	294, 797 24, 300 36. 4 31. 5	1, 331, 885 9, 100 27, 2 41, 9
Fuel:							
Total gallons of gasoline consumed'000 Miles per gallon of gasoline'000 Total gallons of diesel oil consumed'000 Miles per gallon of diesel oil'000 Miles per gallon of other fuel consumed'000	16, 721 15. 4 — —	34, 948 12. 9 — — — —	11, 237 9. 7 85 9. 2	10,545 8-1 96 8-8	18, 736 7- 1 — — — —	39, 856 5- 7 10, 681 6- 2	132,043 9.6 10,862 6.3
Weight of goods carried:							
Total tons of goods carried'000 Average weight carried ton	1, 995 0. 4	13, 664 0. 5	9, 382 2- 2	9, 497 3-1	21, 333 4. 9	62,557 11.3	118, 428 4. 2
Net ton miles:							
Total net ton miles performed'000 Average net ton miles per truck	37, 765 900	134, 827 2, 200	167, 308 11, 900	188, 785 21, 800	413,961 39,000	2, 274, 834 187, 300	3, 217, 480 21, 900
Capacity ton miles:							
Total capacity ton miles 2	233, 378 5, 600 16. 2	569, 202 9, 400 23. 7	334, 848 27, 300 43- 5	451, 491 52, 200 41-8	1,019,795 96,100 40.6	4, 328, 802 356, 500 52- 6	6, 987, 516 47, 500 46. 0
Gross ton miles:							
Total gross ton miles'000 Average gross ton miles per truck'	441, 208 10, 700	1,047,340 17,400	525, 699 37, 300	522, 553 60, 400	991.077 93,400	4, 309, 919 354, 900	7, 837, 796 53, 300

TABLE 3. For Nire Trucks by Gross Vehicle weight Groups

	0-2½ tons	2½-5 tons	5-7½ tons	7½-10 tons	10-15 tons	Over 15 tons	Total
Mileage:							
Total mileage travelled	1,369 5,300 13.7 24.0	22,718 12,600 21.9 28.8	25,294 11,500 21.5 20.9	25,317 14,700 25.6 22.5	37, 919 16, 700 21.9 32.6	146,792 39,100 80.6 19.9	259,409 21,500 57.5 22.9
Fuel:							
Total gallons of gasoline consumed '000 Miles per gallon of gasoline '000 Total gallons of diesel oil consumed '000 Miles per gallon of diesel oil '000 Miles per gallon of other fuel consumed '000 Miles per gallon of other fuel '000	94 14.6 — — —	1,898 12.0 — — —	2,731 9.3 — — —	3,142 7.8 96 8.8 —	5,321 7.1 — — —	17,661 5.4 8,149 6.3	30, 847 6.7 8,245 6.4
Weight of goods carried:							
Total tons of goods carried '000 Average weight carried ton	51 0.7	645 0.9	2,348 2.5	2,612 3.4	6,052 5,2	17,642 12.1	29,350 8.4
Net ton miles:							
Total net ton miles performed	704 3,000	14,134 7,800	50,505 23,000	66,895 38,700	132,669 58,300	1,422,027 369,300	1,686,934 139,600
Capacity ton miles:							
Total capacity ton miles 2	1,302 5,600 54.0	36,663 20,400 38.6	92,283 42,100 54.7	132,336 76,600 50.5	290,714 127,800 45.6	2,332,098 605,600 61.0	2,885,396 238,800 58.5
Gross ton miles:							
Total gross ton miles 3	2,878 12,300	64,848 36,000	133,874 61,000	166,784 96,500	295, 971 130, 200	2,545,885 661,100	3,210,240 265,700
Revenue:							
Total revenue \$'000 Revenue per ton mile ¢ Revenue per mile (total mileage travelled) ¢ Average revenue per truck \$	353 50.1 25.8 1,500	6,029 42.7 26.5 3,300	9,896 19.6 39.1 4,500	9,199 13.8 36.3 5,300	15,636 11.8 41.2 6,900	94,057 6.6 64.1 24,400	135,170 8.0 52.1 11,200

TABLE 4. Private Intercity Trucks by Gross Vehicle Weight Groups

	0-2½ tons	2½-5 tons	5-7½ tons	7½-10 tons	10-15 tons	Over 15 tons	Total
Mileage:							
Total mileage travelled	77,025 10,200 29.1 59.4	139,711 11,100 27.0 48.2	42,892 11,600 20.8 40.3	35,570 12,100 21.5 38.1	68, 446 14, 200 22, 4 41, 1	115,376 21,900 24.7 45.1	479,020 13,000 23.8 46.8
Fuel:							
Total gallons of gasoline consumed	5,167 14.9 — — — —	10,642 13.1 — — —	4,351 9.7 85 9.2 —	4,226 8.4 — — —	9,517 7.2 — — — —	17.059 6.2 1,744 6.0	50.962 9.2 1,829 6.1
Weight of goods carried:							
Total tons of goods carried	732 0.7	1,908 0.7	3,021 2.4	3,811 3.7	9,608 5.3	27,342 10.6	46,422 4.3
Net ton miles:							
Total net ton miles performed	21,287 2,800	51,507 4,100	62,734 16,900	82,020 27,800	214,827 44,600	674,463 128,200	1,106,838 30,000
Capacity ton miles:							
Total capacity ton miles	87,576 11,600 24.3	184,311 14,600 27.9	154,661 41,700 40.6	194,417 65,900 42.2	531,678 110,300 40.4	1,546,475 293,900 43.6	2,699,118 73,200 41.0
Gross ton miles:							
Total gross ton miles of truck	142,303 18,900	335,608 26,600	202,135 54,500	214, 803 72, 800	506,572 105,100	1,335,005 253,700	2,736,426 74,200

## SECTION 11 TRAFFIC PERFORMED BY QUEBEC REGISTERED TRUCKS WITHIN THE PROVINCE, JANUARY 1 - DECEMBER 31, 1957.

#### TABLE 1. All Trucks by Type of Operation

	7		Private		
	For hire	Intercity	Urban	Farm	Total
Mileage:					
Total mileage travelled	197, 826 16, 400 34, 7 26, 1	461, 410 12, 500 22, 4 46, 6	460, 635 7,000 9, 5 39, 5	132, 821 4, 100 16, 4 69, 2	1, 252, 69 8, 50 20. 43.
Fuel:					
Total gallons of gasoline consumed '000 Miles per gallon of gasoline '000 Miles per gallon of diesel oil consumed '000 Miles per gallon of diesel oil '000 Miles per gallon of other fuel consumed '000 Miles per gallon of other fuel	24, 460 7.1 3, 935 6.1 —	48, 803 9. 3 1, 578 5. 8	40, 808 11. 2 788 6. 0	9, 426 14. 1 — — — —	123, 49 9, 6, 30 6.
Weight of goods carried:					
Total tons of goods carried	28, 830 6. 8	46,086 4.2	40, 232 1. 4	2, 424 1. 0	117, 57 3.
Net ton miles:					
Total net ton miles performed	1,000,717 82,800	1,030,968 27,900	383, 840 5, 900	39, 868 1, 200	2, 455, 39 16, 70
Capacity ton miles:					
Total capacity ton miles 2	1,907,802 157,900 52,5	2, 521, 919 68, 400 40. 9	1, 230, 812 18, 800 31, 2	172, 190 5, 300 23. 2	5, 832, 72 39, 70 42.
Gross ton miles:					
Total gross ton miles 2	2,016,402 166,900	2, 571, 065 69, 700	1, 607, 373 24, 500	283, 757 8, 700	6, 478, 59 44, 10
Revenue:					
Total revenue \$'000 Revenue per ton mile \$ Revenue per mile (total mileage travelled) \$ Average revenue per truck \$	94,823 9.5 47.9 7,800			-	-

TABLE 2. All Trucks by Gross Vehicle Weight Groups

	0-2½ tons 0-5,000 lbs.	2½-5 tons 5,001-10,000 lbs.	5-7½ tons 10,001-15,000 lbs.	7½-10 tons 15,001-20,000 lbs.	10-15 tons 20,001-30,000 lbs.	Over 15 tons 30,001 lbs. and over	Total
Mileage:  Total mileage travelled	256, 318	448, 375	106, 074	84, 913	128, 967	228, 045	1, 252, 692
	6, 200	7, 400	7, 500	9, 800	12, 200	18, 800	8, 500
	18. 9	9. 8	17, 1	19. 5	18. 9	24. 9	20, 9
	62. 4	43. 3	30, 4	30. 0	36. 2	36. 2	43, 2
Fuel:  Total gallons of gasoline consumed	16, 672 15. 4 — — — —	34,744 12.9 — — —	10, 937 9, 7 24 9, 2	10, 353 8.1 72 8.8 —	18, 103 7. 1 — — — —	32, 688 5. 8 6, 205 6. 0	123, 497 9. 8 6, 301 6. 0
Weight of goods carried:  Total tons of goods carried	1,995	13, 663	9, 360	9, 471	21, 312	61, 771	117, 572
	0.4	0. 5	2. 2	3. 1	4. 9	10. 6	3. 4
Net ton miles:  Total net ton miles performed'000  Average net ton miles per truck'	37, 711	134, 356	159, 927	185, 081	402, 390	1, 535, 928	2, 455, 393
	900	2, 200	11, 400	21, 400	37, 900	126, 500	16, 700
Capacity ton miles:  Total capacity ton miles <sup>2</sup> '000  Average capacity ton miles per truck  Percentage of capacity utilized	232, 938	566, 604	371, 471	442, 821	987, 334	3, 231, 555	5, 832, 723
	5, 600	9, 400	26, 400	51, 200	93, 000	266, 100	39, 700
	16. 2	23. 7	43. 1	41. 8	40. 8	47. 5	42. 1
Gross ton miles:  Total gross ton miles'000  Average gross ton miles per truck'	440, 248	1,040,481	507, 561	513, 336	959, 369	3, 017, 602	6, 478, 597
	10, 700	17,300	36, 000	59, 400	90, 400	248, 500	44, 100

TABLE 3. For Hire Trucks by Gross Vehicle Weight Groups

		0-2½ tons	2½-5 tons	5-7½ tons	7½-10 tons	10-15 tons	Over 15 tons	Total
Mileage:								
Total mileage travelled	'000	1, 369 5, 300 13. 7 24. 0	22, 495 12, 500 21. 8 28. 5	24, 313 11, 100 20. 2 20. 8	24, 288 14, 100 24. 7 22. 0	35, 590 15, 700 20. 8 32. 3	89, 771 23, 300 43. 7 25. 7	197, 826 16, 400 34, 7 26, 1
Fuel:								
Total gallons of gasoline consumed	,000	94 14. 6 —	1, 885 11. 9 —	2, 613 9, 3	3,006 7,9 72 8,8	4,949 7.2 —	11, 913 5. 6 3, 863 6. 1	24, 460 7, 1 3, 935 6, 1
Total gallons of other fuel consumed	'000	=	ories	_	_	_	_	-
Weight of goods carried:								
Total tons of good carried		51 0. 7	645 0.9	2, 339 2. 4	2, 605 3. 4	6,034 5.2	17, 156 11. 2	28, 830 6. 8
Net ton miles:								
Total net ton miles performed	'000	704 3,000	14,077 7,800	47, 165 21, 500	64, 397 37, 300	125, 313 55, 100	749,061 194,500	1,000,717 82,800
Capacity ton miles:								
Total capacity ton miles <sup>2</sup> Average capacity ton miles per truck  Percentage of capacity utilized	'000	1, 302 5, 600 54. 0	36, 463 20, 200 38. 6	87, 631 40, 000 53. 8	126, 176 73, 000 51. 0	273, 169 120, 100 45. 9	1,383,061 359,100 54.2	1,907,802 157,900 52.5
Gross ton miles:								
Total gross ton miles <sup>3</sup>	'000	2,878 12,300	64, 408 35, 800	126,984 57,900	160, 292 92, 800	277, 919 122, 200	1, 383, 921 359, 400	2,016,402 166,900
Revenue:								
Total revenue \$\text{Revenue per ton mile}\$ Revenue per mile (total mileage travelled) Average revenue per truck	¢ ¢ \$	353 50· 1 25· 8 1, 500	5,971 42,4 26.5 3,300	9, 457 20. 1 38. 9 4, 300	8,947 13.9 36.8 5,200	14, 715 11, 7 41. 3 6, 500	55, 380 7. 4 61. 7 14, 400	94, 823 9. 5 47. 9 7, 800

TABLE 4. Private Intercity Trucks by Gross Vehicle Weight Groups

	0-2½ tons	2½-5 tons	5-7½ tons	7½-10 tons	10-15 tons	Over 15 tons	Total
Mileage:							
Total mileage travelled	76, 426 10, 100 29. 0 59. 5	137.082 10,900 26.8 47.6	40, 656 11,000 19.5 40.1	35, 094 11, 900 21. 3 38. 2	66, 507 13, 800 21, 9 40, 6	105, 645 20, 100 22. 5 45. 2	461, 410 12, 500 22. 4 46. 6
Fuel:							
Total gallons of gasoline consumed '000 Miles per gallon of gasoline '000 Total gallons of diesel oil consumed '000 Miles per gallon of diesel oil '000 Miles per gallon of other fuel consumed '000 Miles per gallon of other fuel '000	5, 118 14. 9 — — —	10, 451 13. 1 — —	4,169 9.7 24 9.2 —	4, 170 8. 4 — — —	9, 256 7. 2 — — —	15, 639 6. 2 1, 554 5. 8	48,803 9-3 1,578 5-8
Weight of goods carried:							
Total tons of goods carried	732 0.7	1,907 0.7	3, 008 2. 4	3, 792 3. 7	9, 605 5- 3	27, 042 10. 5	46,086 4-2
Net ton miles:							
Total net ton miles performed	21, 233 2, 800	51,093 4,100	58, 693 15, 800	80, 814 27, 400	210, 612 43, 700	608, 523 115, 600	1,030,968 27,900
Capacity ton miles:							
Total capacity ton miles?	87, 136 11, 600 24. 4	181, 913 14, 400 28. 1	145, 936 39, 300 40. 2	191, 907 65, 100 42-1	516, 762 107, 200 40. 8	1, 398, 265 265, 700 43- 5	2, 521, 919 68, 400 40. 9
Gross ton miles:							
Total gross ton miles 3	141, 343 18, 800	329, 189 26, 100	190, 887 51, 500	212,078 71,900	492, 916 102, 200	1, 204, 652 228, 900	2, 571, 065 69, 700

TABLE 5. Private Urban Trucks by Gross Vehicle Weight Groups

	0 - 2½ tons	2½-5 tons	5-7½ tons	7½-10 tons	10-15 tons	Over 15 tons	Total
Mileage: Total mileage travelled	110,001 6,300	232, 569 7, 400	34, 142 5, 300	24,862 6,800	26, 432 7, 700	32, 629 10, 800	460,635 7,000
Average distance each ton was carried Percentage of total mileage travelled empty	14. 2 57. 2	5. 1 36. 7	12. 1 22. 4	13. 1 25. 6	11. 7 30. 6	10. 1 35. 9	9. 5 39. 5
Fuel: Total gallons of gasoline consumed'000	6.945	10 000	2 401	0.005	0.040	2 100	40.000
Miles per gallon of gasoline	15.8	18, 299 12. 7	3, 491	3,095 8.0	3, 842 6. 9	5, 136 5, 4 788	40, 808 11. 2 788
Miles per gallon of diesel oil			=			6.0	6.0
Weight of goods carried:							
Total tons of goods carried	618 0. 2	10, 117 0. 4	3, 405 1. 6	2,934 2,1	5, 585 3, 6	17, 573 8. 5	40, 232 1. 4
Net ton miles:							
Total net ton miles performed	8,784 500	51, 784 1, 600	41, 198 6, 400	38, 433 10, 500	65, 297 18, 900	178,344 58,900	383,840 5,900
Capacity ton miles:							
Total capacity ton miles 2	86,733 5,000 10.1	271,690 8,600 19.1	107, 734 16, 800 38. 2	120,417 32,700 31.9	194,009 56,300 33.7	450, 229 148, 700 39, 6	1, 230, 812 18, 800 31. 2
Gross ton miles:							
Total gross ton miles	181, 814 10, 400	520, 154 16, 500	154, 132 24, 000	136, 917 37, 200	185, 327 53, 700	429,029 141,700	1,607,373 24,500

TABLE 6. Private Farm Trucks by Gross Vehicle Weight Groups

	0 - 2½ tons	2½-5 tons	5-7½ tons	7½-10 tons	10-15 tons	Over 15 tons	Total
Mileage:  Total mileage travelled	68, 522 4, 300 11. 8 74. 6	56, 229 3, 900 17, 5 65, 9	6,963 3,900 21,2 46.7	669 2,300 10.2 49.6	438 6,300 13.3 37.3		132, 821 4, 100 16. 4 69. 2
Fuel:  Total gallons of gasoline consumed '000 Miles per gallon of gasoline Total gallons of diesel oil consumed '000 Miles per gallon of diesel oil Total gallons of other fuel consumed '000 Miles per gallon of other fuel	4, 515 15, 2 — — — —	4,109 13.7 — — —	664 10. 5 — — —	82 8. 2 - - - -	56 7.8 — — — —	-	9,426
Weight of goods carried:  Total tons of goods carried	59 <b>4</b> 0. 4	994 0. 9	608 3. 5	140 4.3	88 4. 3	annin .	2,424 1.0
Net ton miles:  Total net ton miles performed'000 Average net ton miles per truck'	6, 990 400	17,402 1,200	12,871 7,200	1, 437 4, 900	1,168 16,900	_	39, 868 1, 200
Capacity ton miles:  Total capacity ton miles <sup>2</sup>	57, 767 3, 600 12-1	76, 538 5, 300 22. 7	30,170 17,000 42.7	4, 321 14, 700 33. 3	3,394 49,200 34.4		172, 190 5, 300 23. 2
Gross ton miles:  Total gross ton miles	114, 213 7, 100	126, 730 8, 800	35, 558 20, 000	4, 049 13, 800	3,207 46,500	_	283,757 8,700

¹ Ton miles divided by miles travelled with load,
² Capacity ton miles are determined by multiplying the actual total number of miles travelled by the estimated capacity or the weight of the heaviest load carried, whichever is larger.
³ Gross ton miles are determined by adding to the total ton miles performed the weight of the vehicle empty (tare) multiplied by total miles travelled.

TABLE 7. Selected Statistics of Intercity Traffic by Gross Vehicle Weight Groups

				For hire			
Gross vehicle weight	Weight of goods carried	Total miles travelled with load	Total net ton miles	Average weight carried	Average distance per ton	Total revenue	Revenue per ton mile
	'000 tons	'000	'000	tons	miles	\$'000	¢
10,000 lbs. and under	696	17, 114	14, 781	0.9	21. 2	6, 32	24 42.3
10,001 - 20,000 lbs	4, 944 38, 23		111,562	2. 9	22. 6	18, 40	16. 5
20,001-30,000 lbs	6,034	24,088	125, 313	5. 2	20.8	14,71	15 11.7
30,001 - 50,000 lbs	17, 156	66, 674	749,061	11. 2	43. 7	55, 38	7. 4
50,001 lbs. and over	-	_	-	-	-	-	-
Total	28, 830	145, 098	1, 000, 717	6. 8	34. 7	94, 82	9. 5
			Į.	Private intercit	у		
	Weight of goods carried	tra	l miles velled th load	Total net ton miles	Avei weig carr	ght	Average distance per ton
	'000 tons	5	000	'000	tor	S	miles
10,000 lbs. and under	2	, 639	102,770	72, 3	26	0.7	27. 4
10,001-20,000 lbs	6	, 800	46,029	139,50	7	3. 0	20.5
20,001-30,000 lbs	9	605	39, 515	210,6	12	5. 3	21. 9
30,001 - 50,000 lbs	27,	,042	57, 909	608,5	23	10. 5	22. 5
50,001 lbs. and over		-			-	-	-
Total	46	, 086	246, 223	1, 030, 9	68	4.2	22. 4

### SECTION III. INTRAPROVINCIAL TRAFFIC PERFORMED BY QUEBEC REGISTERED TRUCKS JANUARY 1 $\sim$ DECEMBER 31, 1957

TABLE 1. Selected Statistics by Gross Vehicle Weight Groups

						•						
	For nire											
Gross vehicle weight	Weight of goods carried	tra	d miles velled h load	Total net ton miles	Average weight carried	Average distance per ton	Total revenue	Revenue per ton mile				
	'000 tons	,	000	'000	tons	miles	\$'000	¢				
10,000 lbs. and under	180		4,603	4, 734	1.0	26. 3	1,029	21. 7				
10,001-20,000 lbs	1,637		17, 509	58, 174	3. 3	35. 5	7.094	12. 2				
20,001- 30,000 lbs	2, 348		14,612	80,262	5. 5	34. 2	7,788	9. 7				
0,001-50,000 lbs	8,823		46,969	521,098	11. 1	59. 1	39, 277	7. 5				
0,001 lbs. and over	-			_	-	-	_	_				
Total	12, 988		83, 693	664,268	7. 9	51.1	55,188	8, 3				
		Private intercity										
	Weight o goods carried	f	trav	l miles velled h load	Total net ton miles	Aver weig	ht	Average distance per ton				
	'000 ton	S	,	000	'000	tor	ıs	miles				
0,000 lbs. and under	2	406		94, 569	69, 49	5	0. 7	28. 9				
0,001-20,000 lbs	6	445		42, 581	132, 10	9	3. 1	20. 5				
0,001 - 30,000 lbs	8	,906		37, 464	202, 42	25	5. 4	22. 7				
0,001-50,000 lbs	25	, 383		53, 799	558, 27	75	10.4	22-0				
0,001 lbs. and over		**		-	-	-	-	diana				
Total	43	. 140		228.413	962. 36	м	4.2	22 3				

FABLE 2. Selected Statistics by Commodity Groups

				For hire			
Commodity classification	Weight of goods carried	Total miles travelled with load	Total net ton miles	Average weight carried	Average distance per ton	Total revenue	Revenue per ton mile
	'000 tons	'000	'000	tons	miles	\$'000	¢
Agricultural products	282	1,929	15,860	8.2	56. 3	1, 09	6.9
Animals and animal products	1,098	15,800	73, 295	4.6	66.8	5,82	7.9
Mine products	4,868	6,944	76, 592	11.0	15.7	5, 70	0 7.4
Forest products	857	3, 206	31, 303	9.9	37. 1	1, 94	1 6. 1
Manufactures and miscellaneous	4,061	34,073	303, 213	8.9	74.7	24, 61	.3 8.1
N.O.S. general freight	1,822	21,741	163, 505	7.5	89.7	16,01	9.8
Total	12, 988	83, 693	664, 268	7.9	51, 1	55, 18	8. 3
				Private interci	ty		
	Weight o goods carried	tr	al miles avelled th load	lled net ton		age ght ied	Average distance per ton
	'000 ton	s	'000	'000	to	ns	miles
Agricultural products	1	, 108	11,770	41,09	8	3.5	37. 1
Animals and animal products		, 265	27, 405	88,84	19	3. 2	70.2
Mine products	24	. 686	27, 266	260, 34	7	9.5	10.5
Forest products	5	, 438	23,056	165, 72	23	7.2	30.5
Manufactures and miscellaneous	9	, 538	123, 195	368, 63	31	3.0	38.6
N.O.S. general freight	1	, 105	15,721	37, 65	66	2.4	34. 1
Total	43	, 140	228, 413	962, 30	04	4.2	22. 3

### SECTION IV. INTERPROVINCIAL AND INTERNATIONAL TRAFFIC PERFORMED BY QUEBEC REGISTERED TRUCKS JANUARY 1 - DECEMBER 31,1957

TABLE 1. Tons of Goods Carried

TABLE 1, 1005 of doods Califed											
		For hire	9	Pri	vate intercit	y	Total				
Origin or destination	Into Quebec	Out of Quebec	Total	Into Quebec	Out of Quebec	Total	Into Quebec	Out of Quebec	Total		
					'000 tons						
Newfoundland	_	-	-	-	-	_		_	-		
Prince Edward Island	<del>†</del> -	-	-	_	-	-	_	_	_		
Nova Scotia	-	-	name.	-	-		_	-	_		
New Brunswick	48	49	97	2	10	12	50	59	109		
Ontario	1,030	1,003	2,033	70	506	576	1, 100	1, 509	2, 609		
Manitoba	3	3	6	-	-		3	3	6		
Saskatchewan	_	-			-	_	-	-	-		
Alberta	10	9	19	-	-		10	9	19		
British Columbia				-	-	Millore	_	_	_		
United States	92	56	148	70	200	270	162	256	418		
Total	1, 183	1, 120	2, 303	142	716	858	1, 325	1, 836	3, 161		

TABLE 2. Selected Statistics by Gross Vehicle Weight Groups

					For hire				,
Gross vehicle weight	Weight of goods carried	Total m travel with le	led	Total net ton miles	Averag weight carried	t [	Average distange per ton	Total revenue	Revenue per ton mile
	'000 tons	,000	0	000	tons	tons		\$'000	¢
10,000 lbs. and under	3		317	165		0. 5	51. 7	163	99. 0
10,001-20,000 lbs	29		, 148	6, 998		3.3	242.6	975	13. 9
20,001 - 30,000 lbs	47	2	, 074	10, 139	1	4. 9	214. 9	1, 264	12. 5
30,001-50,000 lbs	2, 224	54	, 749	709, 446	1	3. 0	319.0	40, 623	5. 7
50,001 lbs. and over	2,303 59		-	_		-	-	_	_
Total			, 288	726, 748	12	2.3	315.5	43,025	5. 9
		,			Private into	ercity			
	Weight o goods carried	f	Total miles travelled with load		Total net ton miles		Avera weig carri	ht	Average distance per ton
	'000 ton	s	*(	000	000		ton	S	miles
10,000 lbs. and under		21		1, 428		866		0.6	40. 8
10,001-20,000 lbs.		49		1,726		6, 307		3.7	128. 3
20,001-30,000 lbs.		252		1, 267		7, 274		5. 7	28. 9
30,001 - 50,000 lbs		536		7,001		84,076		12.0	156. 9
50,001 lbs. and over		-		-		-			-
Total		858		11,422		98, 523		8, 6	114, 8

TABLE 3. Selected Statistics by Commodity Groups

					For hire			
Commodity classification	Weight of goods carried	Total mi travell with lo	ed net t	on	Average weight carried	Average distance per ton	Total revenue	Revenue per ton mile
	'000 tons	'000	'00	0	tons	miles	\$'000	¢
Agricultural products	61	2,	561 28	, 736	11.2	467. 9	1, 27	4.4
Animals and animal products	57		1	, 536	10.3	343.5	1, 189	
Mine products	41	1 '		, 872	14.8	361.6	589	
Forest products	37			, 191	12. 6	219.9	328	
Manufactures and miscellaneous	1, 343	34,		, 976	12. 2	312.0	24, 794	
N.O.S. general freight	764	18,	705 236	, 437	12. 6	309.5	14, 850	6.3
Total	2,303	59,	288 726	, 748	12.3	315.5	43,025	5.9
				F	Private intercit	у		
	Weight o goods carried		Total miles travelled with load		Total net ton miles	Aver weig carri	ght	Average distance per ton
	'000 ton	S	'000		'000	ton	ıs	miles
Agricultural products		95	2, 6	79	28, 3	10	10. 6	297. 3
Animals and animal products		27	7	63	6, 3	98	8. 4	236. 6
Mine products		16	2	65	3, 4	23	12.9	217. 5
Forest products		440	2,0	22	17, 9	85	8. 9	40.8
Manufactures and miscellaneous		274	5, 6		42,3		7. 5	154. 6
N.O.S. general freight		6		17		22	1.3	4. 0
Total		858	11, 4	22	98. 5	23	8. 6	114.8

APPENDIX
Sampling Results

Type of operation	0-2½ tons 0-5,000 lbs.	2½-5 tons 5,001-10,000 lbs.	5-7½ tons 10,001-15,000 1bs.	7½-10 tons 15,001-20,000 lbs.	10-15 tons 20,001-30,000 lbs.	Over 15 tons 30,001 lbs. and over	Total				
		Estimated av	erage Quebec tr	uck population J	anuary 1 — Dece	mber 31, 1957					
For hirePrivate:	234	1,801	2, 193	1,728	2, 274	3, 851	12,081				
Intercity Urban Farm	7, 538 17, 500 16, 038	12,613 31,499 14,355	3,710 6,412 1,776	2,950 3,677 294	4, 822 3, 449 69	5, 262 3, 027 3	36, 895 65, 564 32, 535				
Total	41, 310	60, 268	14, 091	8, 649	10, 614	12, 143	147, 075				
			Total number	of trucks select	ed in samples						
For hire	11	202	340	249	418	870	2,090				
Intercity	406 943 874	1,326 3,306 1,511	565 978 279	434 547 45	994 842 23	1, 117 779 1	4,842 7,395 2,733				
Total	2,234	6, 345	2,162	1,275	2, 277	2, 767	17, 060				
·	Number of questionnaires returned completed										
For hire	6	111	178	138	233	510	1, 176				
Intercity Urban Farm	194 455 474	675 1,679 778	236 405 107	192 243 12	464 404 12	531 351 —	2, 292 3, 537 1, 383				
Total	1,129	3,243	926	585	1,113	1,392	8, 388				
		Number	of sampled truck	s reported not in	use during surv	vey week					
For hire	` 1	27	70	52	79	159	388				
Private: Intercity Urban Farm	71 167 189	240 611 359	174 310 106	122 157 17	278 223 5	293 209 1	1.178 1,677 677				
Total	428	1,237	660	348	585	662	3, 920				
		N	umber of question	onnaires returned	incomplete and	unusable					
For hire	3	37	42	26	48	87	243				
Private: Intercity Urban Farm	108 243 160	265 650 257	105 175 44	75 93 11	159 135 4	177 121	889 1,417 476				
Total	514	1,209	366	. 205	346	385	3, 025				
		Nun	ber of questions	aires not return	ed (non-responde	ents)					
For hire	1	27	50	33	58	114	283				
Private: Intercity Urban Farm	33 78 51	146 366 117	50 88 22	45 54 5	93 80 2	116 98 —	483 764 197				
Total	163	656	210	137	233	328	1, 727				



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# MOTOR TRANSPORT TRAFFIC

PROVINCE OF QUEBEC 1958

Published by Authority of
The Honourable Gordon Churchill, Minister of Trade and Commerce

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# PROVINCE OF QUEBEC JANUARY I - DECEMBER 31,1958

CHART-I

#### TRUCK REGISTRATIONS BY TYPE OF OPERATION

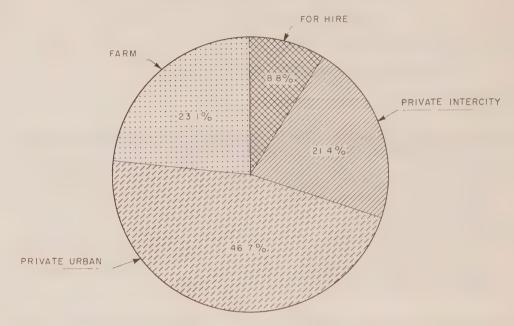
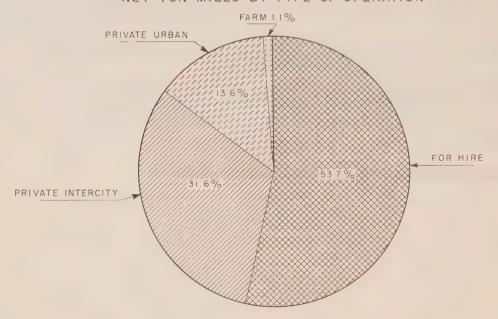


CHART-2

#### NET TON MILES BY TYPE OF OPERATION



#### INTRODUCTION

The 1958 annual report of motor transport traffic in the Province of Quebec is based upon a sample of approximately 12 per cent of trucks registered in the province. To allow for seasonal variations in traffic and to ensure that the selected vehicles represented current registrations, the sample was selected in four quarterly segments with approximately one-fourth of the total selected each quarter. Beginning in the second quarter of 1958, each quarterly sample was spread over three survey weeks with one-third of the sample being used for a seven day period, Sunday through Saturday, per month. Previously each quarterly sample was concentrated in one survey week so that the total sample for the year was spread over only four weeks. Statistics compiled for 1958, therefore, have been based on surveys spread over ten weeks. As a result a much better representation of truck traffic has been obtained.

All trucks registered in the province are represented except: (a) those not engaged in transportation services; (b) military and other government-owned vehicles. Trailers as such were excluded from the sample, but details of tractor-trailer combinations were obtained by including the power units or tractors in the survey.

Vehicles in the sample are stratified by type of operation and by gross vehicle weight groups. The four functional categories used are: for-hire, private intercity, private urban and farm. For-hire vehicles are those operated for compensation or gain according to licence; private intercity vehicles are those owned and operated by firms and individuals on intercity routes to transport their own goods; private urban vehicles are those operated predominantly within urban areas; and farm trucks are those operated by farmers primarily to transport farm produce and supplies.

For-hire and farm trucks ("L" and "N" licences) are the only classes to be registered separately in Quebec. Privately operated vehicles in the sample are classified as "intercity" and "urban" on the basis of replies to the questionnaires.

Further information on the history and the organization of motor transport traffic surveys may be found in the report entitled "Motor Transport Traffic Statistics, National Estimates, 1957".

#### **Expansion of Survey Results**

The distribution of sample vehicles by gross vehicle weight groups and by type of operation was used to provide population estimates as at the time of the sample selection. Sample results were then expanded to represent the operations of all trucks registered in the province by multiplying the sample

results by the inverse ratio of the sample to the population and by the ratio of three months to one week. The expanded data for each of the four quarterly segments were added together to obtain annual provincial estimates.

#### **Review of Survey Results**

Excluding vehicles which do not perform transportation services, the average number of trucks registered in Quebec during the year was 153,465. Of these, 13,461 or 8.8 per cent were for-hire carriers; 32,818 or 21.4 per cent were private intercity vehicles; 71,685 or 46.7 per cent were private vehicles operating predominantly within urban areas; and 35,501 or 23.1 per cent were farm trucks.

In the tables presented herein blanks appear in a number of weight classifications where no vehicles were chosen in any of the quarterly sample selections. It does not necessarily follow that there are no vehicles in the province belonging to these classifications.

#### Section I: Traffic Inside and Outside the Province

Section I contains estimates of total traffic performed by all Quebec registered trucks both inside and outside the province.

Although comprising only 8.8 per cent of Quebec's truck population, for-hire vehicles accounted for 53.7 per cent of total net ton miles and 24.2 per cent of total tons of goods carried during 1958. This results from the high average yearly mileage of these trucks, 21,700 as compared with 9,300 miles for all trucks, and from the heavy average load carried (9.1 tons as compared with 4.6 for all trucks). The heavier loads carried by for-hire

trucks are to be expected since slightly less than half of these vehicles have a gross weight of over 10 tons. The predominance of heavier vehicles in the for-hire class also explains the low miles per gallon of gasoline estimate of 6.9 as compared with a ratio of 9.5 for all trucks.

Some trucks in Quebec are used essentially for personal transportation. Such vehicles account for about 6 per cent of the total mileage travelled by Quebec registered trucks.

#### Section II: Traffic Within the Province

This section presents estimates of traffic performed by Quebec registered trucks entirely inside the province and excludes the "outside the province" portion of interprovincial and international traffic as well as any traffic performed entirely outside the province. Comparing the data in Section I and Section II it will be noted that for-hire vehicles accumulated 45.9 per cent and private intercity 8.3 per cent of their total net ton miles outside of Quebec.

#### Section III: Intraprovincial Traffic

This section includes statistics of for-hire and private intercity operations originating and terminating entirely inside the boundaries of Quebec.

It is estimated that of the total net ton miles performed by both for-hire and private intercity trucks, manufactured products accounted for 41.3 and 43.4 per cent respectively of the commodities carried.

#### Section IV: Interprovincial and International Traffic

Estimates indicate that over four-fifths of the total tons of goods carried by Quebec registered for-hire trucks in interprovincial and international traffic was transferred to or from Ontario; and, that more than two-fifths of the total net ton miles performed and one-third of the revenue earned by for-hire trucks was in interprovincial and international traffic.

#### Appendix 1

During the year survey questionnaires were sent to the owners or operators of 17,829 trucks. Of this number 8,260 questionnaires were returned completed and 3,714 trucks were reported not used during the survey week. In addition 3,604 questionnaires were returned with insufficient information. Non-response totalled 2,251 or 12.6 per cent.

#### Reliability of Motor Transport Traffic Statistics

#### (a) Non-Sampling Variability

A certain amount of variance in motor transport traffic statistics will arise from non-sampling factors including improper reporting by the respondent due to misinterpretation of questions or deliberate mis-statements. Also, the respondent may not keep accurate records of traffic performed. The effect of these factors cannot be measured without a further follow-up and re-enumeration of the statistics reported.

#### (b) Sampling Variability

Estimates of the sampling error have, however, been calculated for the following class totals (see Appendix 2): (1) mileage travelled (2) weight of

goods carried (3) net ton miles and (4) revenue earned. These calculations have been made using a confidence limit of two standard deviations (i.e. allowing 95 out of 100 chances that the stated range contains the true value). The stability of the data varies according to the type of statistics involved and the number of trucks reporting in each category. Hence statistics of class totals are considered more reliable than those for any particular weight group. Of the various types of data presented, the most stable statistics were "total mileage travelled" while variability seemed greatest for "weight of goods carried". This is understandable when we consider that trucks may travel with little or no load so that there is a naturally wide range of weights carried.

December 18, 1959.

## SECTION I. TRAFFIC PERFORMED BY QUEBEC REGISTERED TRUCKS INSIDE AND OUTSIDE THE PROVINCE JANUARY 1 – DECEMBER 31, 1958

TABLE 1. All Trucks by Type of Operation

			Private		
	For hire	Intercity	Urban	Farm	Total
Mileage:					
Total mileage travelled	292,167 21,700 70.7 24.5	465,507 14,200 30.1 47.0	539,731 7,500 10.6 42.1	136,383 3,800 19.3 72.0	1,433,788 9,300 31.8 43.0
Fuel:					
Total gallons of gasoline consumed	6.9 10,035 6.2	48, 811 9.4 1,048 6.2 —	51,034 10.5 559 5.2	10, 143 13.4 —	143, 403 9.5 11, 642 6.1
Weight of goods carried:					
Total tons of goods carried '00  Average weight carried to	40,000	39, 152 4. 8	47,661 1.6	2,102 1.1	117,313 4.6
Net ton miles:					
Total net ton miles performed	2,006,747	1,179,374 35,900	507, 302 7, 100	40,650 1,100	. 3,734,073 24,300
Capacity ton miles:					
Total capacity ton miles 2	3,445,718 256,000 58.2	2,621,470 79,900 45.0	1,485,990 20,700 34.1	180,596 5,100 22.5	7,733,774 50,400 48.3
Gross ton miles:					
Total gross ton miles or truck	3, 939, 690 292, 700	2,870,989 87,500	1, 939, 875 27, 100	297, 954 8, 400	9,048,508 59,000
Revenue:					
Total revenue	7.9		-		
Average annual population	13,461	32, 818	71,685	35,501	153, 465

TABLE 2. All Trucks by Gross Vehicle Weight Groups

	$0-2\frac{1}{2}$ tons $0-5,000$ lbs.	2½-5 tons 5,001-10,000 lbs.	5-7½ tons 10,001-15,000 lbs.	7½-10 tons 15,001-20,000 lbs.	10-15 tons 20,001-30,000 lbs.	Over 15 tons 30,001 lbs. and over	Total
Mileage:							
Total mileage travelled	262,576 6,100 26.1 61.9	498,049 7,800 21.4 48.3	115,982 8,500 14.8 33.7	100,590 10,600 18.2 33.3	148, 373 13, 400 23, 2 35, 0	308, 218 25, 000 42, 0 28, 6	1,433,788 9,300 31.8 43.0
Fuel:							
Total gallons of gasoline consumed	17, 460 15. 0 — — — —	41,020 12.1 — — —	12, 286 9.4 — — —	12,488	19,846 7.2 718 7.6	40,303 6.0 10,924 6.0 —	143,403 9,5 11,642 6.1 —
Weight of goods carried:							
Total tons of goods carried	1,471 0.4	7,474	10,620 2.0	12, 240 3. 3	23.294 5.6	62, 214 11. 9	117,313 4.6
Net ton miles:							
Total net ton miles performed	38, 431 900	160,005 2,500	157, 355 11, 500	222, 373 23, 500	540,250 48,900	2, 615, 659 212, 200	3,734,073 24,300
Capacity ton miles:							
Total capacity ton miles?	219,090 5,100 17.5	636,950 10,000 25.1	387,424 28,300 40.6	519,670 54,900 42.8	1,188,166 107,700 45.5	4,782,474 388,000 54.7	7,733,774 50,400 48.3
Gross ton miles:							
Total gross ton miles 3	428,027 9,900	1,166,136 18,300	· 539, 416 39, 400	626, 251 66, 100	1,216,458 110,200	5,072,220 411,500	9,048,508 59,000
Average annual population	43,164	63,759	13, 708	9,470	11,037	12,327	153,465

TABLE 3. Selected Statistics by Gross Vehicle Weight Groups

				Fcr hire						
	Weight of goods carried	Total miles travelled with load	Total net ton miles	Average weight carried	Average distance per ton	Total revenue	Revenue per ton mile			
	'000 tons	'000	'000	tons	miles	\$'000	¢			
20,000 lbs. and under	6,850	56,628	124,90	3 2.2	18.2	29,96	5 24.0			
20,001-30,000 lbs	4,907	31,507	206,34	9 6.5	42.1	21,72	6 10.5			
30,001-50,000 lbs	16,641	132,310	1,675,49	5 12.7	100.7	106, 10	6.3			
50,001 lbs. and over	_	_	-	-	-		-			
Total	28,398	220,445	2,006,74	7 9,1	70.7	157, 79	7.9			
	Private intercity									
	Weight o goods carried	tr	Total miles travelled with load		Aver weig carr	ght	Average distance per ton			
	'000 ton	S	'000	'000	ton	ıs	miles			
10,000 lbs. and under	1	1,955	98,202	70,6	12	0.7	36.1			
10,001-20,000 lbs.		5,846	42,905	135,3	47	3.2	23.2			
20,001-30,000 lbs	8	3,890	41,042	229,7	24	5.6	25.8			
30,001-50,000 lbs	22	2,461	64,660	743,6	91	11.5	33.1			
50,001 lbs. and over		-	-		-	-	_			
Total	39	9, 152	246, 809	1,179,3	74	4.8	30.1			

# SECTION II. TRAFFIC PERFORMED BY QUEBEC REGISTERED TRUCKS WITHIN THE PROVINCE JANUARY 1 - DECEMBER 31, 1958

TABLE 1. All Trucks by Type of Operation

		View In Eve		Private		m-t-1
		For hire	Intercity	Urban	Farm	Total
Mileage:						
Total mileage travelled  Average yearly mileage per truck  Average distance each ton was carried  Percentage of total mileage travelled empty	'000	209,552 15,600 39.0 29.5	447,988 13,700 27.9 47.3	539,731 7,500 10.6 42.1	136,383 3,800 19.3 72.0	1,333,654 8,700 23.3 44.9
Fuel:						
Total gallons of gasoline consumed	'000 '000 '000	25,101 7.3 4,019 6.3 —	46,493 9.5 722 6.1	51,034 10.5 559 5.2	10,143 13,4 — — —	132,771 9.8 5,300 6.2
Weight of goods carried:						
Total tons of goods carried  Average weight carried <sup>1</sup>	'000 ton	27,796 7.3	38,755 4.6	47,661 1.6	2,102	116,314 3.7
Net ton miles:						
Total net ton miles performed	'000	1,085,124 80,600	1,082,049 33,000	507,302 7,100	40,650 1,100	2,715,125 17,700
Capacity ton miles:						
Total capacity ton miles <sup>2</sup>	'000	2,078,059 154,400 52.2	2,420,798 73,800 44.7	1,485,990 20,700 34.1	180,596 5,100 22.5	6,165,443 40,200 44.0
Gross ton miles:					[ ]	
Total gross ton miles 3	'000	2,283,580 169,600	2,644,431 80,600	1,939,875 27,100	297,954 8,400	7,165,840 46,700
Revenue:						
Total revenue	\$'000 ¢ ¢ \$	106,009 9.8 50.6 7,900	_ _ _		-	. =
Average annual population		13,461	32,818	71.685	35,501	153,465

TABLE 2. All Trucks by Gross Vehicle Weight Groups

	0-2½ tons 0-5,000 lbs.	2½-5 tons 5.001-10,000 lbs.	5-7½ tons 10,001-15,000 lbs.	7½-10 tons 15,001-20,000 lbs.	10-15 tons 20,001-30,000 lbs.	Over 15 tons 30.001 lbs. and over	Total
Mileage:							
Total mileage travelled	261,283 6,100 26.0 61.9	497,143 7,800 21.3 48,3	113,792 8,300 14.5 33.6	98,212 10,400 17.8 33.0	139,452 12,600 20.6 36.1	223,772 18,200 27.2 34.2	1,333.654 8,700 23.3 44.9
Fuel:							
Total gallons of gasoline consumed	17,359 15.1 ——————————————————————————————————	40,947 12.1 — — —	12,070 9.4 — —	12,132 8.1 — — —	18,774 7.2 462 7.6 —	31,489 6.2 4,838 6.0 —	132,771 9.8 5.300 6.2
Weight of goods carried:						And the state of t	
Total tons of goods carried	1,471	7,474 0.6	10,614 2.0	12,227 3.3	23,175 5.4	61,353 11.3	116,314 3.7
Net ton miles:							
Total net ton miles performed	38,299 900	159,420 2,500	153,950 11,200	217,562 23,000	478,022 43,300	1,667,872 135,300	2,715,125 17,700
Capacity ton miles:							
Total capacity ton miles <sup>2</sup>	218,153 5,100 17.6	635,781 10,000 25,1	379,429 27,700 40.6	504,902 53,300 43.1	1,097,945 99,500 43.5	3,329,233 270,100 50.1	6,165,443 40,200 44.0
Gross ton miles:							
Total gross ton miles <sup>3</sup> '000 Average gross ton miles per truck	425,753 9,900	1,163,482 18,200	528,629 38,600	593,640 62,700	1,119,075 101,400	3,335,261 270,600	7,165,840 46,700
Average annual population	43,164	63,759	13,708	9,470	11,037	12,327	153,465

Ton miles divided by miles travelled with load.

Capacity ton miles are determined by multiplying the actual number of miles travelled by the estimated capacity or the weight of the heaviest load carried, whichever is larger.

Gross ton miles performed are determined by adding to the total ton miles performed the weight of the vehicle empty (tare) multiplied by total miles travelled.

#### SECTION III. INTRAPROVINCIAL TRAFFIC PERFORMED BY QUEBEC REGISTERED TRUCKS JANUARY 1-DECEMBER 31, 1958

TABLE 1. Selected Statistics of Intercity Traffic by Gross Vehicle Weight Groups

For hire

				T OI HILL					
	Weight of goods carried	Total miles travelled with load	Total net ton miles	Average weight carried	Average distance per ton	Total revenue	Revenue per ton mile		
	'000 tons	,000	'000	tons	miles	\$'000	¢		
20,000 lbs. and under	1,072	17,287	50,475	2.9	47.1	7,462	14.8		
20,001 - 30,000 lbs	2,076	14,811	93,190	6.3	44.9	9,913	10.6		
30,001 - 50,000 lbs	6,749	46,528	584,093	12.6	86.6	40,987	7.0		
50,001 lbs and over	_	-	-	_	-	_	_		
Total	9, 897	78, 626	727, 760	9.3	73.5	58, 362	8.0		
	Private intercity								
	Weight of goods carried	tr	al miles avelled th load	Total net ton miles	Average weight carried		Average distance per ton		
	'000 tons		°000 .	. '000	tor	ıs	miles		
10,000 lbs. and under	1,	667	90,109	63,1	20	0.7	. 37.9		
10.001 - 20.000 lbs.	5.	. 511	38,423	122,9	11	3.2	22.3		
20,001 - 30,000 lbs.	7,	571	36,860	209, 0	74	5.7	27.6		
30.001 -50,000 lbs.		422	52,357	591,5	76	11.3	30.5		
50.001 lbs, and over		_	-		_	-	_		
Total	34,	.171	217, 749	986, 7	LI .	4.5	28. 9		

TABLE 2. Selected Statistics of Intercity Traffic by Commodity Groups

	For hire										
Commodity classification	Weight of goods carried	Total mile travelled with load		t Average weight carried	Average distance per ton	Total revenue	Revenue per ton mile				
	'000 tons	'000	,000	tons	miles	\$'000	¢				
Agricultural products	263	2, 480	18, 49	5 7.4	70.3	2, 054	11.1				
Animals and animal products	1, 139	12, 10	65, 78	5.4	57.8	5, 797	8.8				
Mine products	2, 019	5, 49	69, 97	9 12.7	34.7	4, 816	6.9				
Forest products	398	3, 59	42,60	11.9	106.9	2,467	5.8				
Manufactures and miscellaneous	3,526	29, 00	300, 75	1 10.4	85, 3	23, 769	7.9				
N.O.S. general freight	2,552	25, 94	230, 13	9 8.9	90, 2	19, 459	8. 5				
Total	9, 897	78, 62	727, 76	9,3	73.5	58, 362	8.0				
	Private intercity										
	Weight o goods carried	Total miles travelled with load		Total net ton miles	Aver wei carr	ght	Average distance per ton				
	'000 ton	S	'000	'000	tor	ns	miles				
Agricultural products	1	, 049	11, 319	48, 79	97	4.3	46.5				
Animals and animal products	1	, 173	24, 518	72, 96	35	3.0	62. 2				
Mine products	15	, 755	21, 124	198, 42	24	9.4	12.6				
Forest products	3	, 566	18, 715	152, 18	32	8. 1	42.7				
Manufactures and miscellaneous	9	, 408	115, 110	428, 48	36	3, 7	45.5				
N.O.S. general freight	3	, 220	26, 963	85, 85	57	3.2	26.7				
Total	34	, 171	217, 749	986, 71	11	4,5	28. 9				

#### 

TABLE 1. Tons of Goods Carried by Province of Origin and Destination

Origin or destination		For hire		Private intercity			Total			
Origin or destination	Into Quebec	Out of Quebec	Total	Into Quebec	Out of Quebec	Total	Into Quebec	Out of Quebec	Total	
		'000 tons								
Newfoundland	_	_	_	_	_	_	_	_	_	
Prince Edward Island	-	_		-	_	_	_	_	-	
Nova Scotia	2	2	4		_	_	2	2	4	
New Brunswick	24	38	62	-	-	_	24	38	62	
Ontario	1,051	1, 172	2, 223	273	457	730	1,324	1,629	2, 953	
Manitoba	-		-	-	_	_	-	- 1	_	
Saskatchewan	_	_			_	_	-	_	_	
Alberta	28	38	66	-	_	-	28	38	66	
British Columbia	-	4	4	_	_	-	_	4	4	
Yukon and North West Territories				_	_	_	-	_	_	
United States	148	131	279	4	272	276	152	403	555	
Total	1, 253	1, 385	2, 638	277	729	1, 006	1, 530	2, 114	3, 644	

TABLE 2. Selected Statistics by Commodity Groups

	VI SCIECTED			oroups						
				For hire						
Commodity classification	Weight of goods carried	Total miles travelled with load	Total net ton miles	Average weight carried	Average distance per ton	Total revenue	Revenue per ton mile			
	'000 tons	'000	'000	tons	miles	\$'000	¢			
Agricultural products	91	1,510	22, 164	14.7	241.4	1,395	6.3			
Animals and animal products	131	6,902	87,462	12.7	668.3	2,882	3.3			
Mine products	15	437	3,593	8.2	239.3	233	6.5			
Forest products	96	679	12, 193	17.9	127. 2	802	6.6			
Manufactures and miscellaneous	1,405	37,654	448,918	11.9	319.5	29,819	6.6			
N.O.S. general freight	900	21, 055	282,842	13.4	314.3	17,503	6.2			
Total	2, 638	68, 237	857, 172	12.6	324. 9	52, 634	6. 1			
	Private intercity									
	Weight of goods carried	tra	Total miles travelled with load		Aver weig carr	ght	Average distance per ton			
	'000 tons	,	000	,000	ton	s	miles			
Agricultural products		50	1,062	15,43	35	14.5	306.8			
Animals and animal products		7	526	6:	28	1.2	87.6			
Mine products		51	424	5, 25	51	12.4	102.5			
Forest products		356	2,916	29,0	10	9.9	81.6			
Manufactures and miscellaneous		450	6, 132	58,30	05	9.5	129.6			
N.O.S. general freight		92	2, 207	15,34	16	7.0	166.7			
Total	1,	, 006	13, 267	123, 9	15	9.3	123.3			

#### APPENDIX I

				A. Popula	tion										
Type of operation	0-2½ tons 0-5,000 lbs.	2½-5 tons 5,001-10,0 lbs.	5-7½ tons 10,000-15,000 lbs.	7½-10 tons 15,001-20,000 lbs.		10-15 tons 20,001-30,000 lbs.	Over 15 tons 30,001 lbs. and over	Total							
		Estimated a	verage Quebec tru	ck populat	ion Ja	muary 1—Deceπ	nber 31, 1958								
For hire	252	2,01	8 2,640	2	2, 200	2, 271	4,080	13,461							
Private:			2 474		0.00	4 007	4 555	00.010							
Intercity	7, 323	11,70			2, 278	4,287	4,757	32,818							
Urban	17,911	34,33	1	9	1,624	4,376	3,490	71,685							
Farm	17,678	15,70	5 1,647		368	103	-	35,501							
Total	43, 164	63, 75	9 13,708	5	, 470	11, 037	12,327	153, 465							
	B. Survey Response														
	trucks selected questionnaires trucks reported not in not returned					Number of ques not returned or incomplete and	returned								
For hire		2,468	1	,332		463		673							
Private:						000		1 000							
Intercity		4,396		,044		980		1,372							
Urban		8,364	3	, 945		1,668		2,751							
Farm		2,601		939		603		1,059							
Total		17, 829	8	, 260		3,714		5,855							

#### APPENDIX 2. Reliability of Motor Transport Traffic Statistics

			Sampling (Two standar		Range (Col. 2 plus and minus col.				
	Number of trucks reporting	Survey estimates	Size	Per cent of col. 2	Lower limit	Upper limit			
	(1)	(2)	(3)	(4)	(5)	(6)			
		'000	'000		'000	'000			
		A. Ti	raffic performed	within the provi	nce¹				
			Total mileag	e travelled					
		miles	miles		miles	miles			
or hire	1,306	. 209,552	. 8,382	4.0	201, 170	217,93			
rivate:		448 000	14 000		400.050	400.00			
Intercity	2,027 3,945	447, 988 539, 731	14,336 14,033	3. 2 2. 6	433,652 525,698	462, 324 553, 764			
Urban Farm	939	136, 383	9,001	6.6	127, 382	145, 38			
Total	8, 217	1, 333, 654	24, 006	1.8	1, 309, 648	1, 357, 66			
			Weight of go	oods carried	J				
		tons	tons		tons	tons			
or hire	. 1,297	27,796	2,335	8.4	25,461	30, 13			
rivate: Intercity	1,740	38,755	3,410	8.8	35,345	42, 16			
Urban	3,085	47,661	3,527	7.4	44, 134	51, 18			
Farm_	481	2, 102	513	24.4	1,589	2,61			
Total	6, 603	116, 314	5,118	4.4	111, 196	121,43			
	Net ton miles								
		net ton miles	net ton miles		net ton miles	net ton miles			
or hire	1,297	1,085,124	80, 299	7.4	1,004,825	1, 165, 42			
Intercity	1,740	1,082,049	64,923	6.0	1,017,126	1,146,97			
Urban	3,085	507,302	19, 277	3.8	488,025	526,57			
Farm	481	40,650	7,642	18.8	33,008	48, 29			
Total	6, 603	2,715,125	103, 175	3.8	2, 611, 950	2,818,30			
			Revenue	e earned					
		\$	\$		\$	\$			
or hire	1, 297	106,009	5, 937	5.6	100,072	111,94			
		B. In	terprovincial and	international t	affic				
			Weight of go	oods carried					
		tons	tons		tons	tons			
or hire	180	2,638	285	10.8	2,353	2,92			
Private: Intercity	83	1,006	223	22. 2	783	1, 22			
			Net ton						
		net ton miles	net ton miles		net ton miles	net ton miles			
For hire	180	857, 172	106,289	12.4	750,883	963,46			
rivate:		123,975			99,924	148,020			
Intercity	83		24,051	19.4					

¹ Estimates for traffic 'inside and outside the province' are considered to be more reliable while the estimates for 'intraprovincial' traffic should be equally reliable.

Note: The chances are 95 out of 100 that the range (sample estimate ± sampling variability) contains the true value. Consider "total mileage travelled" by for-hire trucks. It can be assumed that the computed figure, 209,552,000 miles, will not be more than 8,382,000 miles (plus or minus 4.0 per cent of 209,552,000) away from the "true" value in 95 out of 100 cases. In other words, the chances are 95 out of 100 that the true value will fall within a range of 201,170,000 to 217,934,000.

Canada. Statistics, Bureau of

CATALOGUE No. 53-209



## MOTOR TRANSPORT TRAFFIC

PROVINCE OF QUEBEC

1959



Published by Authority of
The Honourable George Hees, Minister of Trade and Commerce

#### DOMINION BUREAU OF STATISTICS

Public Finance and Transportation Division

Transportation Section

July, 1961 8504-559

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# PROVINCE OF QUEBEC JANUARY I-DECEMBER 31, 1959

CHART-

#### TRUCK REGISTRATIONS BY TYPE OF OPERATION

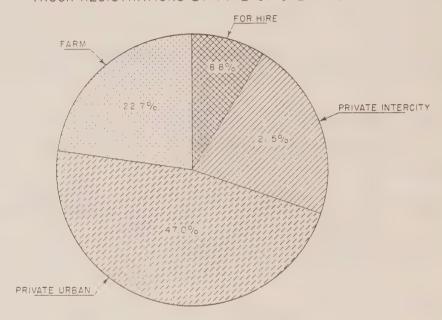
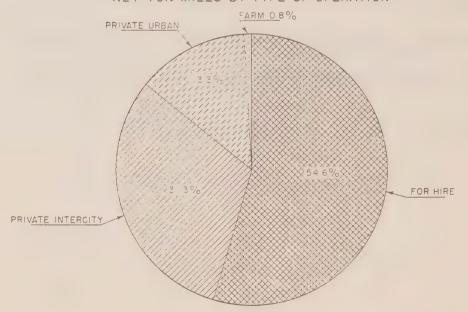


CHART-2

#### NET TON MILES BY TYPE OF OPERATION



#### INTRODUCTION

The 1959 annual report of motor transport traffic in the Province of Quebec is based upon a sample of approximately 11 per cent of trucks registered in the province. To allow for seasonal variations in traffic and to ensure that the selected vehicles represented current registrations the sample was selected in four quarterly segments with approximately one fourth of the total selected each quarter. Each quarterly sample was spread over three survey weeks with one third of the sample being used for a seven day period, Sunday through Saturday, per month. The surveys were therefore spread over twelve weeks during the year.

All trucks registered in the province are represented except: (a) those not engaged in transportation services; and (b) military and other government-owned vehicles. Trailers as such were excluded from the sample, but details of tractor-trailer combinations were obtained by including the power units or tractors in the survey.

Vehicles in the sample are stratified by type of operation and by gross vehicle weight group. The four functional categories used are: for hire, private intercity, private urban and farm. For hire vehicles are those operated for compensation or gain according to licence; private intercity vehicles are those owned and operated by firms and individuals on intercity routes to transport their own goods; private urban vehicles are those operated only within urban areas; and farm trucks are those operated by farmers primarily to transport farm produce and supplies.

In this report vehicles have been classified into the four functional categories as follows:

For hire -"L" licensed vehicles operated in intercity service and/

or urban areas.

Private intercity - "F" licensed vehicles operated beyond urban areas.

Private urban - "F" licensed vehicles operated only within urban areas.

Farm - "N" licensed vehicles.

Since Quebec motor vehicles are licensed on a tare weight basis, it was necessary to estimate equivalent gross vehicle weights to provide comparability with other annual provincial reports. For each truck in the sample the gross vehicle weight was estimated from the recorded tare weight and either the estimated carrying capacity or the weight of the heaviest load carried. The gross vehicle weight of each tractor-trailer combination was estimated from the tare weight of the tractor, the estimated tare weight of the trailer plus the weight of the heaviest load carried. It is emphasized that this method provides only approximately equivalent gross vehicle weights and therefore exact provincial comparability of the weight group classification cannot be assured.

Further information on the history and the organization of motor transport traffic surveys may be found in the reports entitled "Motor Transport Traffic, National Estimates", catalogue no. 53-207, for 1957 and 1958.

#### **Expansion of Survey Results**

Prior to 1959 the distribution of sample vehicles by gross vehicle weight group and by type of operation was used to provide population estimates as at the time of the sample selection. Sample results were then expanded to represent the operations of all trucks registered in the province by multiplying the sample results by the inverse ratio of the sample to the population and by the ratio of three months to one week. The expanded data for each of the four quarterly segments were added together to obtain annual provincial estimates.

To improve the accuracy of the provincial estimates, it was decided to use, for 1959, the peak registration population in calculating the blow-up factor rather than the population as at four different periods during the year.

Unfortunately time has not permitted calculations of the reliability of these estimates similar to those published in the 1958 report. It should also be noted that the section dealing exclusively with trips originating and terminating within the province has been omitted from this report for purposes of simplification.

#### Review of Survey Results

The estimated population of trucks performing transportation services in Quebec during the year rose 2.8 per cent to 157,764 from 153,465 in 1958. Of these 13,968 or 8.8 per cent were for hire trucks; 33,927 or 21.5 per cent were private intercity vehicles; 74,109 or 47.0 per cent were private vehicles operating wholly within urban areas; and 35,760 or 22.7 per cent were farm trucks.

In the following tables blanks appear for some breakdowns of diesel fuel and other fuel by type of operation and by gross vehicle weight. In most of these instances no vehicles were chosen belonging to these classifications in any of the quarterly sample selections. However in one or two cases a few vehicles were selected but the data collected were considered too unreliable to publish. Even

where no vehicles were selected it does not necessarily follow that there were no vehicles in the province belonging to these classifications.

#### Section I: Traffic Inside and Outside the Province

Section I contains estimates of total traffic performed both inside and outside the province by Quebec registered trucks.

Although comprising only 8.8 per cent of Quebec's truck population, for hire vehicles accounted for 54.6 per cent of the total net ton miles and 25.2 per cent of the total tons of goods carried during 1959. This results from the high average yearly mileage of these trucks, 20,900 miles as compared with 9,000 miles for all trucks, and from the heavy average load carried of 9.1 tons compared to 4.5 tons for all trucks. Since almost one half of all for hire vehicles have a gross vehicle weight of over 10 tons the heavier loads carried by these trucks are to be expected. The predominance of heavier vehicles in the for hire class also explains the low estimate of miles per gallon of gasoline, 6.5 compared with 9.4 for all trucks.

It is estimated that 8 per cent of the total net ton miles performed by Quebec registered for hire trucks was in urban operations. Some trucks in Quebec under 10,000 lb. gross vehicle weight are used essentially for personal transportation. Such vehicles accounted for about 7 per cent of the total mileage travelled by Quebec registered trucks.

#### Section II: Traffic Within the Province

This section presents estimates of traffic performed by Quebec registered trucks entirely inside the province and excludes the "outside the province" portion of interprovincial and international traffic as well as any traffic performed entirely outside the province. Comparing the data in Section I and Section II it will be noted that for hire vehicles accumulated 48.8 per cent and private intercity 10.3 per cent of their total net ton miles outside Quebec.

#### Section III: Interprovincial and International Traffic

Interprovincial and international traffic accounted for a significant proportion of the total traffic performed by for hire vehicles, representing approximately one third of the total net ton miles performed and one fourth of the revenue earned by these vehicles. Over four fifths of the total tons of goods carried in this type of traffic by Quebec registered for hire trucks was transported to or from Ontario and one tenth to or from the United States.

#### **Appendix**

During the year survey questionnaires were sent to the owners or operators of 17,974 trucks. Of this number 7,173 were returned completed and

4,209 trucks were reported not used during the survey week. The remaining 6,592 were either returned incomplete and unusable or not returned at all.

June 15, 1961.

# SECTION I. TRAFFIC PERFORMED BY QUEBEC REGISTERED TRUCKS INSIDE AND OUTSIDE THE PROVINCE JANUARY 1 - DECEMBER 31, 1959

TABLE 1. All Trucks by Type of Operation

	For hire		Private			
	rormre	Intercity	Urban	Farm	Total	
Vileage:						
Total mileage travelled '000 Average yearly mileage per truck Average distance each ton was carried Percentage of total mileage travelled empty	291,476 20,900 64.7 20.9	477,623 14,100 25.7 46.6	532,100 7,200 10.7 40.7	113,330 3,200 15.6 59.6	1,414,529 9,000 29.9 40.1	
Fuel:						
Total gallons of gasoline consumed '000 Miles per gallon of gasoline '000 Miles per gallon of diesel oil consumed '000 Miles per gallon of diesel oil '7000 Miles per gallon of other fuel consumed '000 Miles per gallon of other fuel '000	32,697 6.5 13,292 5.9	48, 982 9.3 3, 459 6.1 —	48,660 10.8 1,158 5.6	8,226 13.8 — — —	138, 565 9.4 17, 909 5.9	
Weight of goods carried:						
Total tons of goods carried '000 Average weight carried ton	32,500 9.1	46,827 4.7	47,537 1.6	1,906 0.7	128,770 4.5	
Net ton miles:			!			
Total net ton miles performed'000 Average net ton miles per truck	2, 101, 379 150, 400	1,204,353 35,500	510,079 6,900	29.758 800	3,845,569 24,400	
Capacity ton miles:						
Total capacity ton miles <sup>2</sup> '000  Average capacity ton miles per truck  Percentage of capacity utilized	3,433,137 245,800 61.2	2,874,861 84,700 41.9	1,463,850 19,800 34.8	139,516 3,900 21.3	7,911,364 50,100 48.6	
Gross ton miles:						
Total gross ton miles '000 Average gross ton miles per truck	3,944,723 282,400	3,128,046 92,200	1,957,269 26,400	234,111 6,500	9, 2 <b>64</b> , 149 58, 700	
Revenue:						
Total revenue	157, 996 7. 5 54. 2 11, 300	=		-	=	
Estimated annual population	13,968	33,927	74, 109	35,760	157,764	

TABLE 2. All Trucks by Gross Vehicle Weight Group

	0-2½ tons 0-5,000 lb.			7½-10 tons 15,001-20,000 lb.	10-15 tons 20,001-30,000 lb.	Over 15 tons 30,001 lb. and over	Total
Mileage:							
Total mileage travelled	242,530 5,500 15.7 58.6	506,346 7,700 20.6 44.0	108,453 7,700 16.4 30.5	88,077 9,000 14.4 31.1	143,008 12,500 15.9 36.8	326, 115 25, 600 43.2 27.4	1,414,529 9,000 29.9 40.1
Fuel:			٠				
Total gallons of gasoline consumed	16, 182 15.0 — —	40,843 12.4 — — —	11,696 9.3 — — —	11,246 7.8 —	20,351 7.0 — —	38,247 5.8 17,909 5.9	138,565 9.4 17,909 5.9
Weight of goods carried:		*					
Total tons of goods carried '000 Average weight carried ton	1,748 0.3	7,802 0.6	9,907 2.2	13,448 3.2	30,874 5.4	64,991 11.9	128,770 4.5
Net ton miles:							
Total net ton miles performed	27, 493 600	160,399 2, <b>40</b> 0	162,060 11,500	193,454 19,800	491,463 43,000	2,810,700 220,300	3,845,569 24,400
Capacity ton miles:							
Total capacity ton miles <sup>2</sup> '000 Average capacity ton miles per truck Percentage of capacity utilized	196,346 4,400 14.0	658,881 10,100 24.3	391,233 27,700 41.4	474,642 48,500 40.8	1,210,936 106,100 40.6	4,979,326 390,200 56.4	7,911,364 50,100 48.6
Gross ton miles:							
Total gross ton miles <sup>3</sup> '000 Average gross ton miles per truck	389,513 8,800	1,179,526 18,000	519,467 36,700	533, 260 54, 500	1, 160, 198 101, 600	5,482,185 429,600	9, 264, 149 58, 700
Estimated annual population	44, 155	65,506	14, 137	9,789	11,417	12,760	157,764

See footnotes at end of Table 5, page 9.

TABLE 3. Selected Statistics by Gross Vehicle Weight Group

	For hire									
Gross vehicle weight	Weight of goods carried	Total miles travelled with load	Total net ton miles	Average weight carried	Average distance per ton	Total revenue	Revenue per ton mile			
	'000 tons	'000	'000	tons	miles	\$'000	¢			
20,000 lb. and under	7, 528	60,453	136,520	2.3	18.1	38, 790	28. 4			
20,001-30,000 lb	7,407	26, 364	140,544	5.3	19.0	18,402	13. 1			
30,001-50,000 lb	17, 565	143,755	1,824,315	12.7	104.0	100,804	5. 5			
50,001 lb. and over	-	-	-	-	-	_	-			
Totals	32,500	230, 572	2,101,379	9.1	64.7	157, 996	7. 5			
	Private intercity									
	Weight of goods carried	trav	miles elled load	Total net ton miles	Averag weigh carrie	it i	Average distance per ton			
	'000 tons	'(	000	'000	tons		miles			
10,000 lb. and under	1,9	28	110,844	50,63	6	0.5	26. 3			
10,001 - 20,000 lb	7,0	86	35, 523	116, 96	9	3. 3	16. 5			
20,001-30,000 lb.	12,9	94	41,081	258, 16	9	6.3	19.9			
30,001-50,000 lb.	24,8	19	67, 737	778, 57	9	11.5	31. 4			
50,001 lb. and over		-	-	_		-	_			
Totals	46,8	27	255, 185	1,204,35	3	4.7	25.7			

## SECTION II. TRAFFIC PERFORMED BY QUEBEC REGISTERED TRUCKS WITHIN THE PROVINCE JANUARY 1 - DECEMBER 31, 1959

TABLE 4. All Trucks by Type of Operation

	- hin-		Private		W-4-1
	For hire	Intercity	Urban	Farm	Total
Mileage:					
Total mileage travelled	209,739 15,000 33.6 26.3	451,893 13,300 23.3 47.0	532,100 7,200 10.7 40.7	113,330 3,200 15.6 59.6	1,307,062 8,300 21.1 42.2
Fuel:			1		
Total gallons of gasoline consumed '000 Miles per gallon of gasoline Total gallons of diesel oil consumed '000 Miles per gallon of diesel oil Total gallons of other fuel consumed '000 Miles per gallon of other fuel	26,278 6.9 5,006 5.8	46,462 9.4 2,764 5.8	48,660 10.8 1,158 5.6	8,226 13.8	129,626 9.7 8,928 5.8
Weight of goods carried:					
Total tons of goods carried	32,010	46,406 4.5	47,537 1.6	1,906	127,859 3.6
Net ton miles:			4		
Total net ton miles performed	1,075,277 76,900	1,079,814 31,800	510,079 6,900	29,758 800	2,694,928 17,100
Capacity ton miles:					
Total capacity ton miles <sup>2</sup> '000 Average capacity ton miles per truck Percentage of capacity utilized	2,093,949 149,800 51.4	2,632,153 77,600 41.0	1,463,850 19,800 34.8	139,516 3,900 21.3	6,329,468 40,100 42.6
Gross ton miles:				1	
Total gross ton miles 3	2,369,138 169,500	2,846,304 83,900	1,957,269 26,400	234,111 6,500	7,406,822 46,900
Revenue:					
Total revenue \$'000 Revenue per ton mile ¢ Revenue per mile (total mileage travelled) ¢ Average revenue per truck \$	120,635 10.6 54.6 8,200	=		-	-
Estimated annual population	13,968	33,927	74.109	35,760	157,764

See footnotes at end of Table 5, page 9.

TABLE 5. All Trucks by Gross Vehicle Weight Group

TABLE 5. All Trucks by Gross venicle weight Group												
	0-2½ tons 0-5,000 1b.		5-7½ tons 10,001-15,000 lb.	7½-10 tons 15,001-20,000 lb.	10 - 15 tons 20,001-30,000 lb.	Over 15 tons 30,001 lb. and over	Total					
Mileage:  Total mileage travelled	239,657 5,400 15.5 59.1	502,073 7,700 20.5 43.8	108,133 7,600 16.3 30.6	87, 161 8, 900 14, 2 30, 9	138, 023 12, 100 15, 5 36, 7	232,015 18,200 26.2 34.1	1,307,062 8,300 21.1 42.2					
Fuel:												
Total gallons of gasoline consumed	15, 983 15.0 — — —	40,501 12.4 — — —	11,660 9.3 — — — —	11, 120 7. 8 — — —	19,649 7.0 — — — —	30,713 5.9 8,928 5.8	129,626 9.7 8,928 5.8					
Weight of goods carried:												
Total tons of goods carried	1,734 0.3	7,802 0.6	9,907 2.2	13,448 3.2	30,714 5.4	64,254 11.0	127,859 3.6					
Net ton miles:	İ											
Total net ton miles performed'000 Average net ton miles per truck	26,823 600	160,000 2,400	161,614 11,400	191, 223 19, 500	474, 694 41, 600	1,680,574 131,700	2,694,928 17,100					
Capacity ton miles:				1								
Total capacity ton miles <sup>2</sup>	193, 945 4, 400 13. 8	653,562 10,000 24.5	389,901 27,600 41.5	469,058 47,900 40.8	1,170,649 102,500 40.5	3,452,353 270,600 48.7	6,329,468 40,100 42.6					
Gross ton miles:												
Total gross ton miles'000 Average gross ton miles per truck'	384, 265 8, 700	1,170,886 17,900	518,060 36,600	527, 412 53, 900	, 1,116,346 97,800	3,689,853 289,200	7,406,822 46,900					
Estimated annual population	44,155	65,506	14, 137	9,789	11,417	12,760	157,764					

<sup>1</sup> Ton miles divided by miles travelled with load.
<sup>2</sup> Capacity ton miles are determined by multiplying the actual number of miles travelled by the estimated capacity or the weight of the heaviest load carried, whichever is larger.
<sup>3</sup> Gross ton miles performed are determined by adding to the total ton miles performed the weight of the vehicle empty (tare) multiplied by total

miles travelled.

#### SECTION III. INTERPROVINCIAL AND INTERNATIONAL TRAFFIC PERFORMED BY QUEBEC REGISTERED TRUCKS JANUARY 1 - DECEMBER 31, 1959

TABLE 6. Tons of Goods Carried by Province of Origin and Destination

		For hire		Pr	ivate interc	ity		Total		
Origin and destination	Into Quebec	Out of Quebec	Total	Into Quebec	Out of Quebec	Total	Into Quebec	Out of Quebec	Total	
				4	'000 tons					
Newfoundland	_	_	_		_	_	_	-	_	
Prince Edward Island	-	-	_	_	_	-	-	-	_	
Nova Scotia	-	2	. 2	-	_	_		2	2	
New Brunswick	19	20	39	28	7	35	47	27	74	
Ontario	818	930	1,748	178	353	531	996	1,283	2, 279	
Manitoba	_	_	_	-	-	-	_		_	
Saskatchewan	-	_	dess	www	_	_	-	-	-	
Alberta	42	48	90		_		42	48	90	
British Columbia	_	-	4000	4mm	_	-	_	-	_	
Yukon and Northwest Territories	_	-	-	-	_	-		-	-	
United States	68	129	197	. 215	65	280	283	194	477	
Totals	947	1, 129	2,076	421	425	846	1,368	1,554	2,922	

TABLE 7. Selected Statistics by Commodity Group

				For hire					
Commodity group	Weight of goods carried	Total miles travelled with load	Total net ton miles	Average weight carried	Average distance per ton	Total revenue	Revenue per ton mile		
	'000 tons	'000	000°	tons	miles	\$'000	¢		
Agricultural products	12	603	7, 43	7 12.3	621.0	303	4.1		
Animals and animal products	79	6,973	90,543	13.0	1,147.1	2,720	3.0		
Mine products	44	519	9,30	5 17.9	211.2	408	4.4		
Forest products	60	512	7, 71	1 15.1	128.6	385	5.0		
Manufactures and miscellaneous	972	24,399	300, 298	12.3	308.7	17, 572	5. 9		
N.O.S. general freight	909	27,489	375, 705	13.7	413.5	17,317	4.6		
Totals	2, 076	60, 495	790, 999	9 13.1	380. 9	38, 705	4.9		
ŗ	Private intercity								
	Weight of goods carried	trav	miles elled load	Total net ton miles	Avera weigh carrie	nt	Average listance per ton		
	'000 tons	100	00	'000	tons		miles		
Agricultural products		65	1,662	23,019		13.9	353.1		
Animals and animal products		36	995	6, 197	7	6.2	170.8		
Mine products		35	406	6, 124	Ł	15.1	173.1		
Forest products		330	2,129	23,040	)	10.8	70.0		
Manufactures and miscellaneous		364	7,899	69, 186	5	8.8	189.9		
N.O.S. general freight		16	1,884	4,078	3	2.2	256. 8		
Totals		846	14, 975	131, 644	E	8. 8	155. 6		

#### APPENDIX

				A. Population				
Type of operation	0-2½ tons 0-5,000 1b.	2½-5 ton 5,001-10,0 1b.		7½-10 tons 15,001-20,000 lb.	10-15 tons 20,001-30,000 lb.	Over 15 tons 30,001 lb. and over	Total	
			Estimated Qu	ebec truck popu	ilation in 1959			
For hire	261	2,0	94 2,739	2,283	2,357	4,234	13, 968	
Intercity	7,570	12,0	98 2,554	2,355	4,432	4,918	33,927	
Urban	18, 517	35, 4	95 7, 185	4,780	4,524	3,608	74, 109	
Farm	17,807	15, 8	19 - 1,659	371	104	-	35,760	
Totals	44, 155	65, 5	06 14, 137	9, 789	11,417	12,760	157, 764	
			В	. Survey Respon	nse			
	Total nu trucks se in sam	elected	Number of questionnaires returned comple	trucks i	r of sampled reported not in ng survey week	Number of questionnaires not returned or returned incomplete and unusable		
For hire Private:	3,207		1	, 634	607	966		
Intercity		4, 273	1	, 763	1,054		1,456	
Urban		8,526	3	, 345	2,002		3, 179	
Farm		1, 968		431	546		991	
Totals		17, 974	7	, 173	4, 209		6, 592	





CATALOGUE No. 53-209



Canada. Statistics, Bureau of

# MOTOR TRANSPORT TRAFFIC PROVINCE OF QUEBEC 1960

Published by Authority of
The Honourable George Hees, Minister of Trade and Commerce



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# PROVINCE OF QUEBEC JANUARY I-DECEMBER 31, 1960

TRUCK REGISTRATIONS BY TYPE OF OPERATION

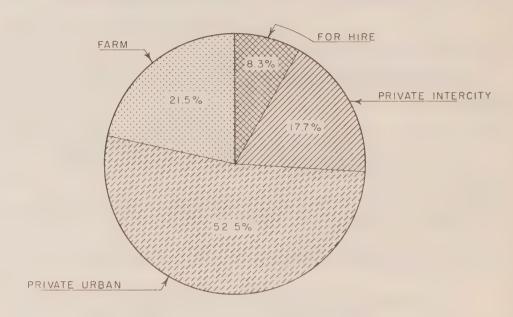
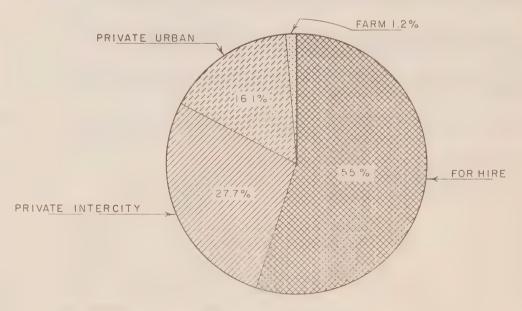


CHART-2

NET TON MILES BY TYPE OF OPERATION



#### INTRODUCTION

The 1960 annual report of motor transport traffic in the Province of Quebec is based upon a sample of approximately 12 per cent of trucks registered in the province. To allow for seasonal variations in traffic and to ensure that the selected vehicles represented current registrations the sample was selected in four quarterly segments with approximately one fourth of the total selected each quarter. Each quarterly sample was spread over three survey weeks with one third of the sample being used for a seven day period, Sunday through Saturday, per month. The surveys were therefore spread over twelve weeks during the year.

All trucks registered in the province are represented except: (a) those not engaged in transportation services; and (b) military and other government-owned vehicles. Trailers as such were excluded from the sample, but details of tractortrailer combinations were obtained by including the power units or tractors in the survey.

Vehicles in the sample are stratified by type of operation and by gross vehicle weight group. The four functional categories used are: for hire, private intercity, private urban and farm. For hire vehicles are those operated for compensation or gain according to licence; private intercity vehicles are those owned and operated by firms and individuals on intercity routes to transport their own goods; private urban vehicles are those operated only within urban areas; and farm trucks are those operated by farmers primarily to transport farm produce and supplies.

In this report vehicles have been classified into the four functional categories as follows:

For hire -"L" licensed vehicles operated in intercity service and/or urban areas.

Private intercity—"F" licensed vehicles operated beyond urban areas.

Private urban - "F" licensed vehicles operated only within urban areas.

Farm -"N" licensed vehicles.

Since Quebec motor vehicles are licensed on a tare weight basis, it was necessary to estimate equivalent gross vehicle weights to provide comparability with other annual provincial reports. For each truck in the sample the gross vehicle weight was estimated from the recorded tare weight and either the estimated carrying capacity or the weight of the heaviest load carried. The gross vehicle weight of each tractor-trailer combination was estimated from the tare weight of the tractor, the estimated tare weight of the trailer plus the weight of the heaviest load carried. It is emphasized that this method provides only approximately equivalent gross vehicle weights and therefore exact provincial comparability of the weight group classification cannot be assured.

Further information on the history and the organization of motor transport traffic surveys may be found in the reports entitled "Motor Transport Traffic, National Estimates", catalogue no. 53-207, for 1957, 1958 and 1959.

#### **Expansion of Survey Results**

Prior to 1959 the distribution of sample vehicles by gross vehicle weight group and by type of operation was used to provide population estimates as at the time of the sample selection. Sample results were then expanded to represent the operations of all trucks registered in the province by multiplying the sample results by the inverse ratio of the sample to the population and by the ratio of three months to one week. The expanded data for each of the four quarterly segments were added together to obtain annual provincial estimates.

Using this method it was found that in some provinces the truck population varied greatly from quarter to quarter. In many cases these changes were not due to an increase or decrease in the

actual truck population but were merely the result of the sample being chosen from an incomplete set of registration files.

To improve the accuracy of the provincial estimates the sample results, since 1959, have been blown up to represent the characteristics of a constant average population throughout the year rather than the population as at four different periods during the year. For this purpose the peak quarterly registration population of the preceding year is deemed to be the average population for the current year. The breakdown of the average population into classes and gross vehicle weight groups is based upon the distribution reported in the whole of the previous year.

#### **Review of Survey Results**

The estimated population of trucks performing transportation services in Quebec during the year rose 4.9 per cent to 165,500 from 157,764 in 1959. Of these 13,700 or 8.3 per cent were for hire trucks; 29,353 or 17.7 per cent were private intercity vehicles; 86,947 or 52.5 per cent were private vehicles operating wholly within urban areas; and 35,500 or 21.5 per cent were farm trucks.

In the following tables blanks appear for some breakdowns of diesel fuel and other fuel by type of operation and by gross vehicle weight. In most of these instances no vehicles were chosen belonging to these classifications in any of the quarterly sample selections. However in one or two cases a few vehicles were selected but the data collected were considered too unreliable to publish. Even where no vehicles were selected it does not necessarily follow that there were no vehicles in the province belonging to these classifications.

#### Section I: Traffic Inside and Outside the Province

Section I contains estimates of total traffic performed both inside and outside the province by Quebec registered trucks.

A new table has been added to this section which summarizes for the year the quarterly commodity tables included in the quarterly report "Motor Transport Traffic, National Estimates", catalogue no. 53-004.

Although comprising only 8.3 per cent of Quebec's truck population, for hire vehicles accounted for 55.0 per cent of the total net ton miles and 25.9 per cent of the total tons of goods carried during 1960. This results from the high average yearly mileage of these trucks, 21,100 miles as compared with 8,800 miles for all trucks, and from the heavy average load carried of 8.3 tons compared to 4.1 tons for all trucks. Since almost one half of all for hire vehicles have a gross vehicle weight

of over 10 tons the heavier loads carried by these trucks are to be expected. The predominance of heavier vehicles in the for hire class also explains the low estimate of miles per gallon of gasoline, 6.7 compared with 9.6 for all trucks. It is estimated that urban operations accounted for 10.2 per cent of the total net ton miles performed by Quebec registered for hire trucks and 3.4 per cent of the total net ton miles performed by private intercity vehicles.

Some trucks in Quebec under 10,000 lb. gross vehicle weight are used essentially for personal transportation. Such vehicles accounted for about 10 per cent of the total mileage travelled by Quebec registered trucks.

#### Section II: Traffic Within the Province

This section presents estimates of traffic performed by Quebec registered trucks entirely inside the province and excludes the "outside the province" portion of interprovincial and international traffic as well as any traffic performed entirely outside the province. Comparing the data in Section I and Section II it will be noted that for hire vehicles accumulated 41.9 per cent and private intercity 9.3 per cent of their total net ton miles outside Quebec.

#### Section III: Interprovincial and International Traffic

Interprovincial and international traffic accounted for a significant proportion of the total traffic performed by for hire vehicles, representing approximately one third of the total net ton miles performed and one sixth of the revenue earned by these vehicles. Over two thirds of the total tons of goods carried in this type of traffic by Quebec registered for hire trucks was transported to or from Ontario and one fifth to or from the United States.

#### **Appendix**

During the year survey questionnaires were sent to the owners or operators of 19,307 trucks. Of this number 8,611 were returned completed and 4,748 trucks were reported not used during the

survey week. The remaining 5,948 were either returned incomplete and unusable or not returned at all.

February 23, 1962.

## SECTION I. TRAFFIC PERFORMED BY QUEBEC REGISTERED TRUCKS INSIDE AND OUTSIDE THE PROVINCE JANUARY 1-DECEMBER 31, 1960

TABLE 1. All Trucks by Type of Operation

	For hire		Private			
	r or nire	Intercity	Urban	Farm	Total	
Mileage:						
Total mileage travelled '000  Average yearly mileage per truck  Average distance each ton was carried  Percentage of total mileage travelled empty	288,721 21,100 58.8 21.5	401,154 13,700 24,9 53,3	642,501 7,400 10.8 42.8	122,782 3,500 15.3 61.1	1,455,258 8,800 27.7 43.0	
Fuel:						
Total gallons of gasoline consumed '000 Miles per gallon of gasoline Total gallons of diesel oil consumed '000 Miles per gallon of diesel oil Total gallons of other fuel consumed '000 Miles per gallon of other fuel	30,567 6.7 13,909 5.9	42,352 9.0 2,968 6.1	57,949 11.0 1,277 5.8	9, 124 13.5 — — —	139,992 9.6 18,154 6.0	
Weight of goods carried:						
Total tons of goods carried '000 Average weight carried ton	31,954 8.3	37,863 5.0	50,852	2,746	123,415 4.1	
Net ton miles:						
Total net ton miles performed	1,879,817 137,200	944, 467 32, 200	549,705 6,300	42,104 1,200	3,416,093 20,600	
Capacity ton miles:						
Total capacity ton miles 2	3,335,339 243,500 56.4	2,249,393 76,600 42.0	1,608,253 18,500 34.2	157, 523 4, 400 26. 7	7,350,508 44,400 46.5	
Gross ton miles:						
Total gross ton miles	3,980,836 290,600	2,480,966 84,500	2, 193, 378 25, 200	273,063 7,700	8,928,243 53,900	
Revenue:						
Total revenue \$'000 Revenue per ton mile ¢ Revenue per mile (total mileage travelled) ¢ Average revenue per truck \$	154,350 8.2 53.5 11,300	-	- - -		=======================================	
Estimated annual population	13,700	29,353	86,947	35,500	165,500	

TABLE 2. All Trucks by Gross Vehicle Weight Group

	0 - 2½ tons 0 - 5,000 lb.		5-7½ tons 10,001-15,000 lb.	7½-10 tons 15,001-20,000 lb.	10-15 tons 20,001-30,000 lb.	Over 15 tons 30,001 lb. and over	Total
Mileage:							
Total mileage travelled	276,010 6,000 /19.3 61.8	552,373 7,800 19.2 48.6	115,832 7,800 13.7 31.3	99,523 9,300 16.0 30.0	139,799 11,800 15.3 34.7	271,721 24,000 42.4 26.5	1,455,258 8,800 27.7 43.0
Fuel:							
Total gallons of gasoline consumed	18, 097 15. 3 — — —	46,122 12.0 — —	12, 221 9. 5 — — — —	12,589 7.9 - - - -	19,755 7.1 — — — —	31,208 5.2 18,154 6.0	139,992 9.6 18,154 6.0
Weight of goods carried:							
Total tons of goods carried '000 Average weight carried ton	1,789 0.3	9,192	11,903 2.0	14,616 3.4	30,716 5.1	55, 199 11. 7	123,415 4.1
Net ton miles:							
Total net ton miles performed	34,599 800	176,386 2,500	162,939 11,000	233,895 21,900	469,317 39,800	2,338,957 206,400	3,416,093 20,600
Capacity ton miles:							
Total capacity ton miles 2	211,712 4,600 16.3	716,773 10,100 24.6	405, 956 27, 300 40. 1	553,879 51,800 42.2	1,151,112 97,500 40.8	4,311,076 380,500 54.3	7,350,508 44,400 46.5
Gross ton miles:							
Total gross ton miles 3'000 Average gross ton miles per truck'	436,429 9,500	1,289,023 18,200	545,038 36,700	615, 262 57, 500	1,121,344 95,000	4,921,147 434,300	8,928,243 53,900
Estimated annual population	45,886	70,924	14,860	10,695	11,804	11,331	165,500

See footnotes at end of Table 6, page 9.

TABLE 3. Selected Statistics by Gross Vehicle Weight Group

	For hire										
Gross vehicle weight	goods trav		l miles velled n load	Total net ton miles		Average weight carried	Average distance per ton	Total revenue		Reve per mil	ton
	'000 tons	'(	000	'000		tons	miles	\$'0	\$'000		
20,000 lb, and under	7, 153		70,397	146,4	424 2.1		20.5	4	6,521		31.8
20,001 - 30,000 lb	7,491		26,887	137,5	55	5.1	18.4	1	8,866		13.7
30,001 - 50,000 lb	17,310	1	29,389	1,595,8	38	12.3	92.2	8	8,963		5.6
50,001 lb. and over	-		-		-	-	-				. —
Totals	31,954 2		26,673	1,879,817		8.3	58.8	15	154, 350		8.2
		Private intercity									
	Weight of goods carried	oods trav		Total miles travelled with load		Total net ton miles	Average weight carried		Average distance per ton		
	'000 tons		3	000		'000	tons			miles	
10,000 lb. and under	2	,523		64,079		35,947	0.6				14.2
10,001-20,000 lb	6	,272		36,427		121,644		3.3			19.4
20,001-30,000 lb.	12,	, 123		38,624		226,208		5.9			18.7
30,001-50,000 lb.	16	, 945		48,380		560,668		11.6			33.1
50,001 lb. and over		-		-		_		-			-
Totals	37,863		187,510			944,467	5.0				24.9

TABLE 4. Selected Statistics by Commodity Group

	For hire										
Commodity group	goods tra		l miles velled n load	Total net ton miles	Averag weight carrie		Average distance per ton	To:		Rever per t mile	on
	'000 tons	'(	000	,000	tons		miles \$		00	¢	
Agricultural products	479		3,058	32,39	191 10.6		67.6		1,957		6.0
Animals and animal products	2,207		43,905 308,7		5	7.0	139.9	18	3,861		6.1
Mine products	11,027		9,919	102,32	4 10	0.3	9.3		9,016		8.8
Forest products	720	4,306		52,34	8 1	2.2	72.7	:	3,316		6.3
Manufactures and miscellaneous	10,821	101,824		868,57	8.5		80.3	73,59			8.5
N.O.S. general freight	6,700		63,661	515,41	3 8.1		76.9	47,60			9.2
Totals	31,954	2	26,673	1,879,81	.7	3.3	58.8	154, 35			8.2
				Private intercity							
	Weight of goods carried		Total miles travelled with load		Total net ton miles		Average weight carried		Average distance per ton		
	'000 tons		,(	000	'000		tons		miles		
Agricultural products		490		6,312	46	6,500		7.4			94.9
Animals and animal products	1,	313		25,759	7:	1,799		2.8			54.7
Mine products	21,	895		19,781	170	637		8.6			7.8
Forest products	3,	574		17, 115	158	3,349		9.3			44.3
Manufactures and miscellaneous	9,	569		106,655	453	3,172		4.2			47.4
N.O.S. general freight	1,	022		11,888	44	1,010		3.7			43.0
Totals	37,	863	187,510		94	1,467	5.0				24.9

#### SECTION II. TRAFFIC PERFORMED BY QUEBEC REGISTERED TRUCKS WITHIN THE PROVINCE JANUARY 1 - DECEMBER 31, 1960

TABLE 5. All Trucks by Type of Operation

	For hire		Private					
	For nire	Intercity	Urban	Farm	Total			
Mileage:								
Total mileage travelled '000 Average yearly mileage per truck Average distance each ton was carried Percentage of total mileage travelled empty	226,678 16,500 34.4 26.0	376, 043 12, 800 22, 7 52, 6	642,601 7,400 10.8 42.8	122, 782 3, 500 15. 3 61. 1	1, 368, 104 8, 300 20.6 44.3			
Fuel:								
Total gallons of gasoline consumed '000 Miles per gallon of gasoline Total gallons of diesel oil consumed '000 Miles per gallon of diesel oil Total gallons of other fuel consumed '000 Miles per gallon of other fuel	27, 723 6.9 5, 906 5.9	39, 774 9. 1 2, 396 6. 1 —	57, 949 11. 0 1, 277 5. 8	9, 124 13. 5 — — —	134, 570 9. 7 9, 579 6. 0			
Weight of goods carried:								
Total tons of goods carried '000 Average weight carried ton	31,760 6.5	37,752 4.8	50,852 1.5	2,746 0.9	123, 110 3. 3			
Net ton miles:								
Total net ton miles performed	1,091,676 79,700	857,027 29,200	549,705 6,300	42, 104 1, 200	2, 540, 512 15, 400			
Capacity ton miles:								
Total capacity ton miles <sup>2</sup> '000 Average capacity ton miles per truck Percentage of capacity utilized	2,241,621 163,600 48.7	2,058,296 70,100 41.6	1,608,253 18,500 34.2	157, 523 4, 400 26. 7	6,065,693 36,700 41.9			
Gross ton miles:								
Total gross ton miles '000 Average gross ton miles per truck	2, 469, 133 180, 200	2, 264, 312 77, 100	2, 193, 378 25, 200	273, 063 7, 700	7, 199, 886 43, 500			
Revenue:								
Total revenue \$'000 Revenue per ton mile ¢ Revenue per mile (total mileage travelled) ¢ Average revenue per truck \$	132, 553 12. 1 58. 5 9, 700	_ _ _		-	=======================================			
Estimated annual population	13,700	29,353	86,947	35, 500	165, 500			

TABLE 6. All Trucks by Gross Vehicle Weight Group

Note   Content   Content								
Total mileage travelled '000		0~5,000	5,001 - 10,000	10,001-15,000	15,001-20,000	20,001-30,000	30,001 lb.	Total
Total mileage travelled '000	Mileage:							
Total gallons of gasoline consumed '000 18,081 45,096 12,078 12,467 9.5 7.9 7.1 5.3 9.7 Total gallons of diesel oil consumed '000 15.3 12.0 9.5 7.9 7.1 5.3 9.7 Total gallons of diesel oil consumed '000 15.3 12.0 9.5 7.9 7.1 5.3 9.7 Total gallons of diesel oil consumed '000 15.3 12.0 9.5 7.9 7.1 5.3 9.7 Total gallons of other fuel consumed '000 15.3 12.0 9.5 7.9 7.1 5.3 9.7 Total gallons of other fuel consumed '000 15.3 9.7 9.7 9.5 9.5 9.7 9.5 9.5 9.5 9.5 9.5 9.5 9.5 9.5 9.5 9.5	Total mileage travelled'000 Average yearly mileage per truck Average distance each ton was carried	6,000 19.3	7,600 19.1	7,700 13.6	9, 200 15. 7	11,500 14.7	17,900 27.1	8,300 20.6
Miles per gallon of gasoline 15.3 12.0 9.5 7.9 7.1 5.3 9.77 Total gallons of diesel oil consumed '000 15.3 12.0 9.5 7.9 7.1 9.579 Miles per gallon of diesel oil consumed '000	Fuel:							
Total tons of goods carried '000 Average weight carried ton 0.3 0.6 2.0 11,901 2.0 3.3 5.1 10.9 3.3    Net ton miles:  Total net ton miles performed '000 34,534 800 2,500 10,900 21,500 38,300 131,300 15,400    Capacity ton miles:  Total capacity ton miles per truck 9,900 27,000 51,100 94,400 272,900 36,700 Percentage of capacity utilized 16.3 25.1 40.2 42.0 40.5 48.1 41.9    Gross ton miles:  Total gross ton miles '000 436,100 9,500 17,800 36,300 56,800 91,900 288,500 43,500    Total gross ton miles per truck 9,500 17,800 36,300 56,800 91,900 288,500 43,500    Total gross ton miles per truck 9,500 17,800 36,300 56,800 91,900 288,500 43,500	Miles per gallon of gasoline Total gallons of diesel oil consumed	15.3	12.0	9.5	7.9	7.1	5.3 9.579	9.7 9,579
Average weight carried¹         ton         0.3         0.6         2.0         3.3         5.1         10.9         3.3           Net ton miles:         Total net ton miles performed         '000         34,534         175,572         161,533         229,639         451,623         1,487,611         2,540,512           Average net ton miles:         Total capacity ton miles:           Total capacity ton miles per truck         4,600         9,900         27,000         51,100         94,400         272,900         36,700           Percentage of capacity utilized         16.3         25.1         40.2         42.0         40.5         48.1         41.9           Gross ton miles:         '000         436,100         1,263,668         539,310         607,354         1,084,924         3,268,530         7,199,886           Average gross ton miles per truck         9,500         17,800         36,300         56,800         91,900         28,500         43,500	Weight of goods carried:							
Total net ton miles performed '000 34,534 800 2,500 10,900 21,500 38,300 131,300 15,400  Capacity ton miles:  Total capacity ton miles² '000 21,515 699,395 401,478 546,958 1,114,668 3,091,679 6,065,693 Average capacity ton miles per truck 4,600 9,900 27,000 51,100 94,400 272,900 36,700 Percentage of capacity utilized 16.3 25.1 40.2 42.0 40.5 48.1 41.9  Gross ton miles:  Total gross ton miles³ '000 436,100 9,500 17,800 36,300 56,800 91,900 288,500 43,500 43,500 10,500 1	Total tons of goods carried							
Average net ton miles per truck 800 2,500 10,900 21,500 38,300 131,300 15,400  Capacity ton miles:  Total capacity ton miles per truck 4,600 9,900 27,000 51,100 94,400 272,900 36,700 Percentage of capacity utilized 16.3 25.1 40.2 42.0 40.5 48.1 41.9  Gross ton miles:  Total gross ton miles per truck 9,500 17,800 36,300 56,800 91,900 288,500 43,500	Net ton miles:							
Total capacity ton miles 2 '000 211,515 699,395 401,478 546,958 1,114,668 3,091,679 6,065,693 Average capacity ton miles per truck 4,600 9,900 27,000 51,100 94,400 272,900 36,700 40.5 48.1 41.9 Gross ton miles:  Total gross ton miles 2 '000 436,100 9,500 17,800 36,300 56,800 91,900 283,500 43,500 43.500								
Average capacity ton miles per truck 4,600 9,900 27,000 51,100 94,400 272,900 36,700 40.5 40.2 42.0 40.5 48.1 41.9 41.9   Gross ton miles:  Total gross ton miles in 1000 436,100 9,500 17,800 36,300 56,800 91,900 283,500 43,500 43,500	Capacity ton miles:							
Total gross ton miles	Average capacity ton miles per truck	4,600	9,900	27,000	51, 100	94, 400	272,900	36,700
Average gross ton miles per truck	Gross ton miles:							
Estimated annual population	Total gross ton miles of truck						288,500	43, 500
	Estimated annual population	45,886	70,924	14, 860	10,695	11,804	11, 331	165, 500

<sup>&</sup>lt;sup>1</sup> Net ton miles divided by miles travelled with load.

<sup>2</sup> Capacity ton miles are determined by multiplying the actual number of miles travelled by the estimated capacity or the weight of the heaviest load carried, whichever is larger.

<sup>3</sup> Gross ton miles performed are determined by adding to the total ton miles performed the weight of the vehicle empty (tare) multiplied by total miles travelled.

### SECTION III. INTERPROVINCIAL AND INTERNATIONAL TRAFFIC PERFORMED BY QUEBEC REGISTERED TRUCKS JANUARY 1 — DECEMBER 31, 1960

TABLE 7. Tons of Goods Carried by Province of Origin and Destination

		For hire		Pr	ivate interc	ity	Total				
Origin and destination	Into Quebec	Out of Quebec	Total	Into Quebec	Out of Quebec	Total	Into Quebec	Out of Quebec	Total		
	'000 tons										
Newfoundland	-	_	-	-	_	_	_	-	cons		
Prince Edward Island	4	4	8	-	-	-	4	4	8		
Nova Scotia	-	1	1	-	1	1	_	. 2	2		
New Brunswick	4	27	31	23	93	116	27	120	147		
Ontario	426	599	1,025	110	501	611	536	1, 100	1,636		
Manitoba	-	-	-	-	_	_	_	-	-		
Saskatchewan		_	_	_	_	_	-	-	-		
Alberta	53	63	116	_	_	_	53	63	116		
British Columbia	_	-	_	-	_	_	- 1	-	_		
Yukon and Northwest Territories	_	_	-	_	_	-	-	-	_		
United States	135	162	297	133	100	233	268	262	530		
Totals	622	856	1, 478	266	695	961	888	1, 551	2, 439		

TABLE 8. Selected Statistics by Commodity Group

	For hire										
Commodity group	goods tra		al miles velled th load	Total ne ton miles	t	Average weight carried	distance		tal nue	Revenue per ton mile	
	'000 tons		'000	000 '000		tons	miles	\$'0	00	¢	
Agricultural products	36		1,090	13,53		12.4	373.0		654	4.8	
Animals and animal products	94		9,799	126, 4	56	12.9	1,351.7		3, 151	2.5	
Mine products	75	489		6,5	82	13.5	87.5		310	4.7	
Forest products	38		599	7, 9	77	13.3	212.7		563	7.1	
Manufactures and miscellaneous	847	26, 429		330, 8	47	12.5	390.5	12,920		3.9	
N.O.S. general freight	388	12,356		164,727		13.3	424.4		8, 349		
Totals	1, 478	50, 762		650, 1	23	12. 8	439. 9	25, 947		4. 0	
				Private intercity							
	Weight of goods carried		trav	l miles velled h load		Total net Average ton weigh miles carries		it c		Average distance per ton	
	'000 tons		10	000		'000	tons			miles	
Agricultural products		66		1,501		20, 037		13.4		301.1	
Animals and animal products		17		847		6, 154		7.3		344.5	
Mine products	121			177		2, 054		11.6		17.1	
Forest products	376			2, 578		21,354		8.3		56.7	
Manufactures and miscellaneous		369		8,252		76,765		9.3		208.3	
N.O.S. general freight		12		436		3, 243	7.4			283.0	
Totals		961		13, 791		129, 607		9.4		134, 8	

#### APPENDIX

					A. Pop	ulation			
Type of operation	0-2½ tons 0-5,000 1b.	2½-5 ton: 5,001-10,0 1b.		5-7½ tons 0,001-15,000 lb.			10-15 tons 20,001-30,000 lb.	Over 15 tons 30,001 lb. and over	Total
			]	Estimated Que	ebec tru	ick popul	ation in 1960		
For hire	426	2,0	052	2,265		2,324	2,458	4, 175	13,700
Intercity	5, 818	11, 1	.98	2,311		2, 449	4, 113	3,464	29, 353
Urban	22,252	42,0	43	8, 334		5, 501	5, 125	3,692	86,947
Farm	17,390	15, 6	31	1,950	421		108	_	35, 500
Totals	45,886	70, 9	24	14,860		10, 695	11,804	11,331	165,500
				В.	Survey	Respons	se .		
	Total num trucks sel in samp	ected	Number of questionnaires returned completed			trucks	per of sampled reported not in ring survey week	not returne	uestionnaires d or returned and unusable
For hire		4,051			2, 208		7	99	1,044
Private:									
Intercity		5,619			2,413		1,4	97	1,709
Urban		8, 247			3,480		2,0	99	2,668
Farm		1,390			510		3	53	527
Totals		19,307			8,611		4,7	48	5,948



CATALOGUE No. 53-209



Canada. Statistics, Bureau of

## MOTOR TRANSPORT TRAFFIC

PROVINCE OF QUEBEC

1961



Published by Authority of
The Honourable George Hees, Minister of Trade and Commerce

#### DOMINION BUREAU OF STATISTICS

Public Finance and Transportation Division
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## PROVINCE OF QUEBEC JANUARY I-DECEMBER 31,1961

CHART-I

#### TRUCK REGISTRATIONS BY TYPE OF OPERATION

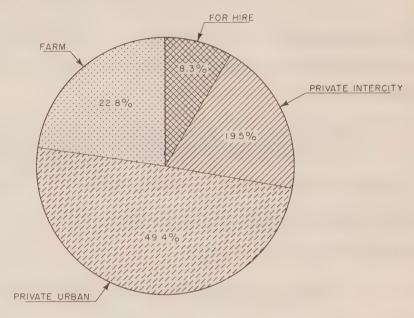
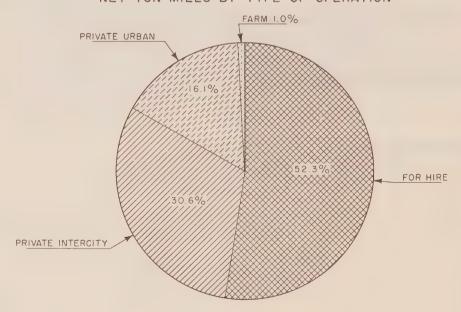


CHART-2

#### NET TON MILES BY TYPE OF OPERATION



#### INTRODUCTION

The 1961 annual report of motor transport traffic in the Province of Quebec is based upon a sample of approximately 11 per cent of trucks registered in the province. To allow for seasonal variations in traffic and to ensure that the selected vehicles represented current registrations the sample was selected in four quarterly segments with approximately one fourth of the total selected each quarter. Each quarterly sample was spread over three survey weeks with one third of the sample being used for a seven day period, Sunday through Saturday, per month. The surveys were therefore spread over twelve weeks during the year.

All trucks registered in the province are represented except: (a) those not engaged in transportation services; and (b) military and other government-owned vehicles. Trailers as such were excluded from the sample, but details of tractor-trailer combinations were obtained by including the power units or tractors in the survey.

Vehicles in the sample are stratified by type of operation and by gross vehicle weight group. The four functional categories used are: for hire, private intercity, private urban and farm. For hire vehicles are those operated for compensation or gain according to licence; private intercity vehicles are those owned and operated by firms and individuals on intercity routes to transport their own goods; private urban vehicles are those operated only within urban areas; and farm trucks are those operated by farmers primarily to transport farm produce and supplies.

In this report vehicles have been classified into the four functional categories as follows:

For hire - "L" licensed vehicles operated in intercity service and/or urban areas.

Private intercity -"F" licensed vehicles operated beyond urban areas.

Private urban - "F" licensed vehicles operated only within urban areas.

Farm -"N" licensed vehicles.

Since Quebec motor vehicles are licensed on a tare weight basis, it was necessary to estimate equivalent gross vehicle weights to provide comparability with other annual provincial reports. For each truck in the sample the gross vehicle weight was estimated from the recorded tare weight and either the estimated carrying capacity or the weight of the heaviest load carried. The gross vehicle weight of each tractor-trailer combination was estimated from the tare weight of the tractor, the estimated tare weight of the trailer plus the weight of the heaviest load carried. It is emphasized that this method provides only approximately equivalent gross vehicle weights and therefore exact provincial comparability of the weight group classification cannot be assured.

For the first time statistics are included in this report for the weight group 50,001 lb. and over, see Table 3. This information was made available due to an increase in gross vehicle weight limits permitted for the year 1961.

Further information on the history and the organization of motor transport traffic surveys may be found in the reports entitled "Motor Transport Traffic, National Estimates", catalogue no. 53-207, for 1957 to 1960.

#### **Expansion of Survey Results**

As this survey is conducted on a sample basis the data obtained for the vehicles included in the sample have to be expanded to represent the traffic of the total truck population. The methods used in this expansion of the raw data have been continually improved. Current procedures are:

- 1. A truck population has to be determined. As each sample is selected quarterly the number of trucks chosen in each sample multiplied by the inverse of the sample selection ratio provides an estimated quarterly population. Prior to 1959 the data for each quarterly sample were expanded to represent the total traffic of the estimated population of the same quarter. In 1959, however, it was decided that it would be preferable to expand data for the four quarterly surveys using a constant population. This constant population would be the peak quarterly population of the previous year calculated by multiplying the sample in each quarter by the inverse of the sample selection ratios.
- The constant population has to be broken down into gross vehicle weight groups and functions.
   This is already partially done as sample selections are stratified by weight group. Therefore it

is only necessary to multiply the sample in each weight group by the inverse of the appropriate selection ratio to arrive at a quarterly population broken down by weight group. The four quarterly populations by gross vehicle weight are added together and an average weight group distribution for the year is computed. This weight group distribution is applied to the constant population. The population then has to be distributed by function. The average distribution of "L" and "N" licensed vehicles for the four quarterly sample populations of the previous year are used as an estimate of the for hire and farm truck populations respectively. The average distribution obtained from the previous year's completed questionnaires is used to segregate "F" licensed vehicles into either the private intercity or private urban category. The above procedure was introduced in 1959. Prior to that year the distribution by function was determined for each quarter separately.

3. When the constant population has been calculated and broken down by function and gross vehicle weight group, it is necessary to allocate vehicles included in current surveys in the same manner.

- 4. Expansion ratios for each gross vehicle weight group of each functional category are then calculated by determining for each breakdown the number of vehicles for which completed questionnaires were received or which were not in use during the survey period and dividing this sum into the constant population.
- 5. As the survey results for sample vehicles relate to one week's operations the expansion ratios calculated in (4) have to be multiplied by 13 to cover the three month period.
- 6. The expanded data for the four quarters are added together to arrive at an annual total.

While the changes and improvements in methods of compilation mentioned above will to some extent

influence comparisons of data between years the effects should not be overly significant. In addition it is emphasized that since the statistics contained in this report are calculated from a sample survey they are only estimates and not actual figures.

It should be noted that in 1961 the description of commodities transported by trucks was changed to conform with the revised "Standard Commodity Classification" produced by the Dominion Bureau of Statistics. Formerly commodities were classified according to the "Railway Freight Commodity Statistics Classification". The change will enable these data to be compared more easily with other commodity data produced by the Dominion Bureau of Statistics.

#### **Review of Survey Results**

The estimated population of trucks performing transportation services in Quebec during the year rose 7.4 per cent to 177,700 from 165,500 in 1960. Of these 14,800 or 8.3 per cent were for hire trucks; 34,684 or 19.5 per cent were private intercity vehicles; 87,816 or 49.4 per cent were private vehicles operating wholly within urban areas; and 40,400 or 22.8 per cent were farm trucks.

In the following tables blanks appear for some breakdowns of diesel fuel and other fuel by type of operation and by gross vehicle weight. In most of these instances no vehicles were chosen belonging to these classifications in any of the quarterly sample selections. However in one or two cases a few vehicles were selected but the data collected were considered too unreliable to publish. Even where no vehicles were selected it does not necessarily follow that there were no vehicles in the province belonging to these classifications.

#### Section I: Traffic Inside and Outside the Province

Section I contains estimates of total traffic performed both inside and outside the province by Quebec registered trucks.

Although comprising only 8.3 per cent of Quebec's truck population, for hire vehicles accounted for 52.3 per cent of the total net ton miles and 26.0 per cent of the total tons of goods carried during 1961. This results from the high average yearly mileage of these trucks 20,300 miles as compared with 8,700 miles for all trucks, and from the heavy average load carried of 8.3 tons compared to 4.0 tons for all trucks. Since almost one half of all for hire vehicles have a gross vehicle weight of over ten tons the heavier loads carried by these trucks are to be expected. The predominance of

heavier vehicles in the for hire class also explains the low estimate of miles per gallon of gasoline 6.5 compared with 9.3 for all trucks. It is estimated that urban operations accounted for 10.9 per cent of the total net ton miles performed by Quebec registered for hire trucks and 3.7 per cent of the total net ton miles performed by private intercity vehicles.

Some trucks in Quebec under 10,000 lb. gross vehicle weight are used essentially for personal transportation. Such vehicles accounted for about 8 per cent of the total mileage travelled by Quebec registered trucks.

#### Section II: Traffic Within the Province

This section presents estimates of traffic performed by Quebec registered trucks entirely inside the province and excludes the "outside the province" portion of interprovincial and international traffic as well as any traffic performed entirely outside the province. Comparing the data in Section I and Section II it will be noted that for hire vehicles accumulated 34.8 per cent and private intercity 7.8 per cent of their total net ton miles outside Quebec.

#### Section III: Interprovincial and International Traffic

Interprovincial and international traffic accounted for a significant proportion of the total traffic performed by for hire vehicles, representing approximately one third of the total net ton miles performed and one sixth of the revenue earned by these vehicles. Almost three quarters of the total tons of goods carried in this type of traffic by Quebec registered for hire trucks was transported to or from Ontario and one sixth to or from the United States.

#### **Appendix**

During the year survey questionnaires were sent to the owners or operators of 19,144 trucks. Of this number 8,703 were returned completed and 4,511 trucks were reported not used during the

survey week. The remaining 5,930 were either returned incomplete and unusable or not returned at all.

## SECTION I. TRAFFIC PERFORMED BY QUEBEC REGISTERED TRUCKS INSIDE AND OUTSIDE THE PROVINCE JANUARY 1 - DECEMBER 31, 1961

TABLE 1. All Trucks by Type of Operation

	For hire		Private		P
	. For life	Intercity	Urban	Farm	Total
Mileage:					
Total mileage travelled	301, 145 20, 300 56, 6 25, 2	13,500 25.9	657, 216 7, 500 11.6 38.9	123,553 3,100 15.7 64.6	1,550,813 8,700 28.1 42.6
Fuel:					
Miles per gallon of gasoline Total gallons of diesel oil consumed Miles per gallon of diesel oil	000 34,950 6.5 12,174 6.0 ———————————————————————————————————	8.9 3,749	60,395 10.7 1,671 5.1	9,355 13.2 — —	155, 003 9.3 17, 594 5.9
Weight of goods carried:					
	000 33,096 on 8.3		49,906 1.4	2,306 0.8	127, 48
Net ton miles:					
Total net ton miles performed'( Average net ton miles per truck	1,874,685 126,700		577, 270 6, 600	36, 123 900	3,581,96 20,20
Capacity ton miles:					
Total capacity ton miles <sup>2</sup> '( Average capacity ton miles per truck Percentage of capacity utilized	3,511,987 237,300 53,4		1,685,179 19,200 34.3	157, 798 3, 900 22, 9	8,005,000 45,000 44.
Gross ton miles:					
Total gross ton miles of truck	3, 989, 679 269, 600		2, 294, 927 26, 100	269, 223 6, 700	9, 432, 119 53, 10
Revenue:					
Total revenue \$' Revenue per ton mile	000 157,006 \$ 8.4 \$ 52.1 \$ 10,600	_			
Estimated annual population	14, 800	34, 684	87, 816	40,400	177, 70

TABLE 2. All Trucks by Gross Vehicle Weight Group

	0-2½ tons 0-5,000 lb.	2½-5 tons 5,001-10,000 lb.	5-7½ tons 10,001-15,000 lb.	7½-10 tons 15,001-20,000 lb.	10-15 tons 20,001-30,000 lb.	Over 15 tons 30,001 lb. and over	Total
Mileage:							
Total mileage travelled	296,516 6,000 23.9 55.8	579, 583 7, 600 21. 6 49. 6	111, 242 7, 600 19, 5 29, 6	115, 523 9, 600 17. 5 30. 1	156, 764 12, 000 16. 9 32. 8	291, 185 23, 900 38. 9 30. 6	1,550,813 8,700 28.1 42.6
Fuel:							
Total gallons of gasoline consumed'000 Miles per gallon of gasoline	19,734 15.0 — —	47,607 12.2 — — —	12,583 8.8 — — —	14,958 7.7 — — — —	22,402 7.0 — — —	37,719 5.0 17,594 5.9	155,003 9.3 17,594 5.9
Weight of goods carried:  Total tons of goods carried '000 Average weight carried' ton	1,656 0.3	8,327 0.6	8, 129 2. 0	15, 711 3. 4	32,570 5.2	61,091 11.8	127, 484 4. 0
Net ton miles:							
Total net ton miles performed	39,564 800	179,650 2,400	158,655 10,800	275, 023 22, 900	550, 980 42, 200	2,378,094 194,800	3,581,966 20,200
Capacity ton miles:							
Total capacity ton miles '	222,874 4,500 17.8	762,761 10,000 23.6	389, 438 26, 600 40. 7	644, 973 53, 800 42. 6	1,312,507 100,500 42.0	4,672,452 382,800 50.9	8,005,005 45,000 44.7
Gross ton miles:							
Total gross ton miles '000 Average gross ton miles per truck	466,372 9,400	1,343,732 17,700	525,217 35,900	724, 817 60, 400	1, 279, 807 98, 000	5,092,165 417,200	9, 432, 110 53, 100
Estimated annual population	49,833	75,967	14,642	11,992	13,063	12, 203	177,700

TABLE 3. Selected Statistics by Gross Vehicle Weight Group

	For hire											
Gross vehicle weight	Weight of goods carried	trav	l miles relled load	Total net ton miles		Average weight carried	Average distance per ton	Total revenue		Reve per t	ton	
	'000 tons	'0	00	'000		tons	miles	\$'0	00	¢		
20,000 lb. and under	6,495		65,511	158,08	30	2.4	24.3	3	8,234		24.2	
20,001 - 30,000 lb.	8,285		33,068	164,67	75	5.0	19.9	2	1,673		13.2	
30,001-50,000 lb.	11,872		56,891	515,83	35	9.1	43.4	5	4,812		10.6	
50,001 lb. and over	6,444		69,691	1,036,09	95	14.9	160.8	4	2,287		4.1	
Totals	33, 096	2	225, 161 1, 874, 685		35	8, 3	56, 6	157, 006			8. 4	
					Pr	ivate intercity	/					
	Weight of goods carried		trav	l miles velled		Total net ton miles	Avera weigl carrie	it		Average distance per ton		
	'000 tons		,0	000		,000	tons			miles		
10,000 lb. and under	1,	426		77,628		55,796		0.7			39.1	
10,001-20,000 lb.	7,	910		45,351		157,318		3.5			19.9	
20,001-30,000 lb.	13,	756		44,491		269,032		6.0			19.6	
30,001-50,000 lb.	13,	342		32,317		307,282		9.5			23.0	
50,001 lb. and over	5,	742		19,206		304,460		15.9			53.0	
Totals	42,	176		218, 993		1, 093, 888		5.0			25.9	

TABLE 4. Selected Statistics by Commodity Group

				For hire			
Commodity group	Weight of goods carried	Total mile travelled with load	ton	et Average weight carried	Average distance per ton	Total revenue	Revenue per ton mile
	'000 tons	'000	,000	tons	miles	\$'000	¢
Live animals	125	2,42	1 16,2	68 6.7	129.9	1,13	6.9
Food, feed, beverages and tobacco	4,292	52,70	392,3	28 7.4	91.4	22,6	5.8
Crude materials, inedible	10,574	13,32	0 145,6	72 10.9	13.8	10,4	78 7.2
Fabricated materials, inedible	6,659	32,7	0 428,4	10 13.1	64.3	25,86	6.0
End products, inedible	3,299	47,8	8 295,0	6.2	89.4	40,40	13.7
General freight	8,147	76,18	597,0	7.8	73.3	56,4	9.5
Totals	33, 096	225, 10	1,874,6	85 8. 3	56,6	157, 0	8,4
				Private interci	y		
	Weight of goods carried		otal miles travelled with load	Total net ton miles	Avera weigl carrie	ht	Average distance per ton
	'000 tons		'000	'000	tons		miles
Live animals		332	5,440	18,95	2	3.5	57.1
Food, feed, beverages and tobacco	. 4,	128	69,615	251,82	0	3.6	61.0
Crude materials, inedible	26,	013	33,494	313,39	2	9.4	12.0
Fabricated materials, inedible	8,	999	37,554	346,01	4	9.2	38.4
End products, inedible	1,	582	46,568	92,97	3	2.0	58.8
General freight	1,	122	26,322	70,73	7	2.7	63.0
Totals	42,	176	218, 993	1,093,88	8	5, 0	25, 9

#### SECTION II. TRAFFIC PERFORMED BY QUEBEC REGISTERED TRUCKS WITHIN THE PROVINCE JANUARY 1-DECEMBER 31, 1961

TABLE 5. All Trucks by Type of Operation

		Dan bina		Private		
		For hire	Intercity	Urban	Farm	Total
Mileage:						
Total mileage travelled	000	247, 928 16, 800 37. 1 28. 4	455, 666 13, 100 24. 0 53. 8	657, 216 7, 500 11. 6 38. 9	123, 553 3, 100 15. 7 64. 6	1, 484, 35 8, 40 22- 43.
Fuel:				i		
Total gallons of gasoline consumed	1000	31, 432 6. 7 6, 225 6. 0	48, 601 9.0 3, 290 5.8	60, 395 10. 7 1, 671 5. 1	9, 355 13. 2	149, 78 9. 11, 18 5.
Weight of goods carried:						
Total tons of goods carried	'000 ton	32,986 6.9	42,000 4.8	49,906	2, 306	127, 19
Net ton miles:			1			
Total net ton miles performed	*000	1, 222, 677 82, 600	1,008,711 29,100	577, 270 6, 600	36, 123 900	2, 844, 78 16, 00
Capacity ton miles:						
Total capacity ton miles Average capacity ton miles per truck	'000	2,494,094 168,500 49.0	2,482,340 71,600 40.6	1,685,179 19,200 34.3	157, 798 3, 900 22. 9	6,819,41 38,40 41.
Gross ton miles:		İ			į	
Total gross ton miles 3	'000	2,760,483 186,500	2, 695, 530 77, 700	2, 294, 927 26, 100	269, 223 6, 700	8,020,16 45,10
Revenue:						
Total revenue	\$'000 ¢ ¢ \$	135, 358 11. 1 54. 6 9, 100	-	- - -	entre entre entre entre	- - -
Estimated annual population		14, 800	34,684	87,816	40,400	177, 70

TABLE 6. All Trucks by Gross Vehicle Weight Group

	0-2½ tons 0-5,000 lb.	2½-5 tons 5,001-10,000 lb.	5-7½ tons 10,001-15,000 1b.	7½-10 tons 15,001-20,000 lb.	10 - 15 tons 20,001-30,000 lb.	Over 15 tons 30,001 lb. and over	Total
Mileage:		1					
Total mileage travelled'000 Average yearly mileage per truck Average distance each ton was carried Percentage of total mileage travelled empty	296, 516 6, 000 23, 9 55, 8	577, 993 7, 600 21, 3 49, 6	111,072 7,600 19.5 29.6	114, 905 9, 600 17. 4 30. 0	153, 135 11, 700 16, 5 32, 7	230, 742 18, 900 27. 3 35. 3	1, 484, 363 8, 400 22. 4 43. 9
Fuel:							
Total gallons of gasoline consumed	19,734	47, 496 12. 2 — — — —	12,556 8.8 — — — —	14, 884 7. 7 — — — —	21,912 7.0 — — — —	33, 201 5.0 11, 186 5.8 —	149,783 9.5 11,186 5.8
Weight of goods carried:	ŧ						
Total tons of goods carried	1,656 0.3	8, 327 0. 6	8, 129 2. 0	15,711 3.4	32, 570 5- 2	60, 805 11. 1	127, 198 3. 4
Net ton miles:	ı						
Total net ton miles performed'000 Average net ton miles per truck'	39, 564 800	177, 345 2, 300	158, 125 10, 800	273, 381 22, 800	537, 674 41, 200	1,658,692 135,900	2,844,781 16,000
Capacity ton miles:							
Total capacity ton miles	222, 874 4, 500 17. 8	759, 149 10, 000 23. 4	388, 361 26, 500 40. 7	640, 581 53, 400 42. 7	1, 282, 463 98, 200 41. 9	3, 525, 983 288, 900 47. 0	6, 819, 411 38, 400 41. 7
Gross ton miles:							
Total gross ton miles Average gross ton miles per truck	466, 372 9, 400	1, 337, 585 17, 600	524, 208 35, 800	720,606 60,100	1, 249, 941 95, 700	3,721,451 304,900	8,020,163 45,100
Estimated annual population	49,833	75, 967	14,642	11,992	13,063	12, 203	177, 700

<sup>1</sup> Net ton miles divided by miles travelled with load.
2 Capacity ton miles are determined by multiplying the actual number of miles travelled by the estimated capacity or the weight of the heaviest load carried, whichever is larger.
3 Gross ton miles performed are determined by adding to the total ton miles performed the weight of the vehicle empty (tare) multiplied by total miles travelled.

## SECTION III. INTERPROVINCIAL AND INTERNATIONAL TRAFFIC PERFORMED BY QUEBEC REGISTERED TRUCKS JANUARY 1 - DECEMBER 31, 1961

TABLE 7. Tons of Goods Carried by Province of Origin and Destination

		For hire		Pr	ivate interc	ity	Total		
Origin and destination	Into Quebec	Out of Quebec	Total	Into Quebec	Out of Quebec	Total	Into Quebec	Out of Quebec	Total
					'000 tons				
Newfoundland		_	-			***		_	-
Prince Edward Island	2	2	4	_	_		2	2	4
Nova Scotia	3	6	9		1	1	3	. 7	10
New Brunswick	24	47	71	21	36	57	45	83	128
Ontario	554	612	1, 166	111	379	490	665	991	1,656
Manitoba	3	3	6	-		_	3	3	6
Saskatchewan	_	_	-	2	2	4	2	2	4
Alberta	41	42	83				41	42	83
British Columbia	_	_	_	-	_		_	-	_
Yukon and Northwest Territories	_	_	_	_	_	9000	-	-	_
United States	109	143	252	187	61	248	296	204	500
Totals	736	855	1, 591	321	479	800	1,057	1, 334	2, 391

TABLE 8. Selected Statistics by Commodity Group

	For hire											
Commodity group	Weight of goods carried	trav	l miles velled h load	Total net net miles		Average weight carried	Average distance per ton	Tot		per	renue ton	
	'000 tons	'(	000	'000		tons	miles	\$'0	00	-	¢	
Live animals	1		121	79	99	6.6	697.4		60		7.5	
Food, feed, beverages and tobacco	275		10,695	144,10	05	13.5	522.6		4,647		3.2	
Crude materials, inedible	112		1,658	28,66	66	17.3	255.1		892		3. 1	
Fabricated materials, inedible	449		8,424	115, 27	72	13.7	257. 2		4,772		4.1	
End products, inedible	433		14,387	139,40	05	9.7	322.1		9,205		6.6	
General freight	321		12,475	181, 17	74	14.5	564.2		4,858		2.7	
Totals	1, 591		47, 760	609,42	21	12. 8	383. 0	0 24,			4. 0	
	Private intercity											
	Weight of goods carried		trav	l miles velled n load		Total net ton miles	Average weight carried		Avera distan per to		е	
	'000 tons		,(	000		'000	tons	,		miles		
Live animals		13		554		3,326	3	6.0			248.7	
Food, feed, beverages and tobacco		141		3,553		42,01	2	11.8			297.8	
Crude materials, inedible		377		2,396		30, 100	3	12.6			79.9	
Fabricated materials, inedible		195		2,804		23,044		8. 2			118.4	
End products, inedible		50		1,765		10,568	3	6.0			209.9	
General freight		24		810		4,700		5.8			203.4	

11,882

113, 756

9.6

142.3

800

Totals .....

#### APPENDIX

					A. Po	pulation			
Type of operation	0-2½ tons 0-5,000 lb.	2½-5 ton 5,001-10,0 lb.	s )00	5-7½ tons 10,001-15,000 lb.	15,001	10 tons -20,000 b.	10-15 tons 20,001-30,000 lb.	Over 15 tons 30,001 lb. and over	Total
				Estimated Qu	ebec tr	uck popu	lation in 1981		
For hire	448	2, 4	114	2,351		2,562	2,728	4, 297	14,800
Private:									
Intercity	6,892	13,0		2,853		3, 256	4,845	3,834	34,684
Urban	22,940	42, 392		7,416		5,595	5,401	4,072	87,816
Farm	19,553	18,	157 2,02:			579	89	-	40, 400
Totals	49,833	75,	967	14, 642		11,992	13,063	12, 203	177,700
				В	Survey	y Respon	se		
	Total num trucks sel in samp	ected	cted questionnaires				ber of sampled s reported not in ring survey weel	not returned	uestionnaires l or returned and unusable
For hire		4,250			2, 341		7	46	1, 163
Private:									
Intercity		5, 398			2,367		1, 3	85	1,646
Urban		8,279			3,550		2,0	55	2,674
Farm		1, 217			445		3	25	447
Totals		19, 144			8,703		4, 5	311	5,930



CATALOGUE No. 53-209

Canada. Statistics, Bureau of



# MOTOR TRANSPORT TRAFFIC PROVINCE OF QUEBEC

1962



Published by Authority of
The Minister of Trade and Commerce

#### DOMINION BUREAU OF STATISTICS

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PROVINCE OF QUEBEC

JANUARY I-DECEMBER 31,1962

CHART-!

#### TRUCK REGISTRATIONS BY TYPE OF OPERATION

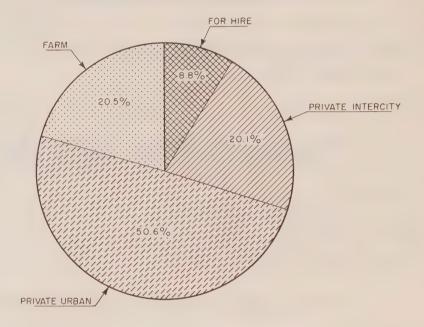
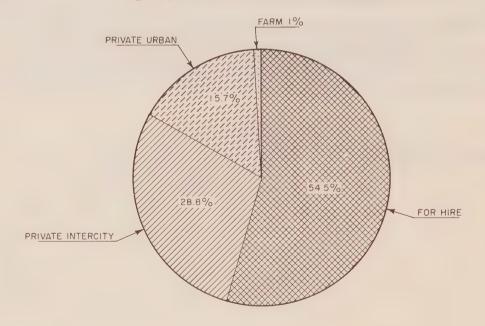


CHART-2

#### NET TON MILES BY TYPE OF OPERATION



#### INTRODUCTION

The 1962 annual report of motor transport traffic in the Province of Quebec is based upon a sample of approximately 11 per cent of trucks registered in the province. To allow for seasonal variations in traffic and to ensure that the selected vehicles represented current registrations the sample was selected in four quarterly segments with approximately one fourth of the total selected each quarter. Each quarterly sample was spread over three survey weeks with one third of the sample being used for a seven day period, Sunday through Saturday, per month. The surveys were therefore spread over twelve weeks during the year.

All trucks registered in the province are represented except: (a) those not engaged in transportation services; and (b) military and other government-owned vehicles. Trailers as such were excluded from the sample, but details of tractor-trailer combinations were obtained by including the power units or tractors in the survey.

Vehicles in the sample are stratified by type of operation and by gross vehicle weight group. The four functional categories used are: for hire, private intercity, private urban and farm. For hire vehicles are those operated for compensation or gain according to licence; private intercity vehicles are those owned and operated by firms and individuals on intercity routes to transport their own goods; private urban vehicles are those operated only within urban areas; and farm trucks are those operated by farmers primarily to transport farm produce and supplies.

In this report vehicles have been classified into the four functional categories as follows:

For hire -''L'' licensed vehicles operated in intercity service

and/or urban areas.

Private intercity -"F" licensed vehicles operated beyond urban areas.

Private urban -"F" licensed vehicles operated only within urban areas.

Farm -"N" licensed vehicles.

Since Quebec motor vehicles are licensed on a tare weight basis, it was necessary to estimate equivalent gross vehicle weights to provide comparability with other annual provincial reports. For each truck in the sample the gross vehicle weight was estimated from the recorded tare weight and either the estimated carrying capacity or the weight of the heaviest load carried. The gross vehicle weight of each tractor-trailer combination was estimated from the tare weight of the tractor, the estimated tare weight of the trailer plus the weight of the heaviest load carried. It is emphasized that this method provides only approximately equivalent gross vehicle weights and therefore exact provincial comparability of the weight group classification cannot be assured.

For the first time statistics are included in this report for the weight group 50,001 lb. and over, see Table 3. This information was made available due to an increase in gross vehicle weight limits permitted for the year 1961.

Further information on the history and the organization of motor transport traffic surveys may be found in the reports entitled "Motor Transport Traffic, National Estimates", Catalogue No. 53-207, for 1957 to 1961.

#### **Expansion of Survey Results**

As this survey is conducted on a sample basis the data obtained for the vehicles included in the sample have to be expanded to represent the traffic of the total truck population. The methods used in this expansion of the raw data have been continually improved. Current procedures are:

- 1. A truck population has to be determined. As each sample is selected quarterly the number of trucks chosen in each sample multiplied by the inverse of the sample selection ratio provides an estimated quarterly population. Prior to 1959 the data for each quarterly sample were expanded to represent the total traffic of the estimated population of the same quarter. In 1959, however, it was decided that it would be preferable to expand data for the four quarterly surveys using a constant population. This constant population would be the peak quarterly population of the previous year calculated by multiplying the sample in each quarter by the inverse of the sample selection ratios.
- 2. The constant population has to be broken down into gross vehicle weight groups and functions. This is already partially done as sample selections are stratified by weight group. Therefore it is only necessary to multiply the sample in each weight group by the inverse of the appropriate selection ratio to arrive at a quarterly population broken down by weight group. The four quarterly populations by gross vehicle weight are added together and an average weight group distribution for the year is computed. This weight group distribution is applied to the constant population. The population then has to be distributed by function. The average distribution of "L" and "N" licensed vehicles for the four quarterly sample populations of the previous year are used as an estimate of the for hire and farm truck populations respectively. The average distribution obtained from the previous year's completed questionnaires is used to segregate "F" licensed vehicles into either the private intercity or

private urban category. The above procedure was introduced in 1959. Prior to that year the distribution by function was determined for each quarter separately.

- 3. When the constant population has been calculated and broken down by function and gross vehicle weight group, it is necessary to allocate vehicles included in current surveys in the same manner.
- 4. Expansion ratios for each gross vehicle weight group of each functional category are then calculated by determining for each breakdown the number of vehicles for which completed questionnaires were received or which were not in use during the survey period and dividing this sum into the constant population.
- 5. As the survey results for sample vehicles relate to one week's operations the expansion ratios calculated in (4) have to be multiplied by 13 to cover the three month period.

6. The expanded data for the four quarters are added together to arrive at an annual total.

While the changes and improvements in methods of compilation mentioned above will to some extent influence comparisons of data between years the effects should not be overly significant. In addition it is emphasized that since the statistics contained in this report are calculated from a sample survey they are only estimates and not actual figures.

It should be noted that in 1961 the description of commodities transported by trucks was changed to conform with the revised "Standard Commodity Classification" produced by the Dominion Bureau of Statistics. Formerly commodities were classified according to the "Pailway Freight Commodity Statistics Classification". The change will enable these data to be compared more easily with other commodity data produced by the Dominion Bureau of Statistics.

#### **Review of Survey Results**

The estimated population of trucks performing transportation services in Quebec during the year rose 7.5 per cent to 191,000 from 177,700 in 1961. Of these 16,000 or 8.8 per cent were for hire trucks; 38,379 or 20.1 per cent were private intercity vehicles; 96,721 or 50.6 per cent were private vehicles operating wholly within urban areas; and 39,290 or 20.5 per cent were farm trucks.

In the following tables blanks appear for some breakdowns of diesel fuel and other fuel by type of operation and by gross vehicle weight. In most of these instances no vehicles were chosen belonging to these classifications in any of the quarterly sample selections. However in one or two cases a few vehicles were selected but the data collected were considered too unreliable to publish. Even where no vehicles were selected it does not necessarily follow that there were no vehicles in the province belonging to these classifications.

#### Section I: Traffic Inside and Outside the Province

Section I contains estimates of total traffic performed both inside and outside the province by Quebec registered trucks.

Although comprising only 8.8 per cent of Quebec's truck population, for hire vehicles accounted for 54.5 per cent of the total net ton miles and 27.2 per cent of the total tons of goods carried during 1962. This results from the high average yearly mileage of these trucks 19,500 miles as compared with 8,900 miles for all trucks, and from the heavy average load carried of 8.2 tons compared to 4.2 tons for all trucks. Since almost one half of all for hire vehicles have a gross vehicle weight of

over ten tons the heavier loads carried by these trucks are to be expected. The predominance of heavier vehicles in the for hire class also explains the low estimate of miles per gallon of gasoline 6.5 compared with 9.5 for all trucks. It is estimated that urban operations accounted for 12.9 per cent of the total net ton miles performed by Quebec registered for hire trucks and 4.6 per cent of the total net ton miles performed by private intercity vehicles.

From the month of April until mid-July 1962 many major Quebec for hire carriers were involved in a labour dispute and virtually ceased operations during this period. The effects of this dispute are not too noticeable on the annual totals as the results for the remainder of the year were extremely good. This was to be expected as the economy was very buoyant throughout the year with the Gross National Product rising 8.0 per cent.

Some trucks in Quebec under 10,000 lb. gross vehicle weight are used essentially for personal transportation. Such vehicles accounted for about 13 per cent of the total mileage travelled by Quebec registered trucks.

#### Section II: Traffic Within the Province

This section presents estimates of traffic performed by Quebec registered trucks entirely inside the province and excludes the "outside the province" portion of the interprovincial and international traffic as well as any traffic performed entirely outside the province. Comparing the data in Section I and Section II it will be noted that for hire vehicles accumulated 32.8 per cent and private intercity 7.9 per cent of their total net ton miles outside Quebec.

#### Section III: Interprovincial and International Traffic

Interprovincial and international traffic accounted for a significant proportion of the total traffic performed by for hire vehicles, representing approximately one third of the total net ton miles performed

and one seventh of the revenue earned by these vehicles. Almost three quarters of the total tons of goods carried in this type of traffic by Quebec registered for hire trucks was transported to or from Ontario and one sixth to or from the United States.

#### Appendix

During the year survey questionnaires were sent to the owners or operators of 21,737 trucks. Of this number 9,884 were returned completed and 6,028 trucks were reported not used during the

survey week. The remaining 5,825 were either returned incomplete and unusable or not returned at

October 16, 1963.

### SECTION I. TRAFFIC PERFORMED BY QUEBEC REGISTERED TRUCKS INSIDE AND OUTSIDE THE PROVINCE JANUARY 1 - DECEMBER 31, 1962

TABLE 1. All Trucks by Type of Operation

			Private		m-4-1
	For hire	Intercity	Urban	Farm	Total
Mileage:					
Total mileage travelled '000 Average yearly mileage per truck Average distance each ton was carried Percentage of total mileage travelled empty	325, 708 19, 500 57, 2 22, 8	524, 820 13,700 28.0 55.4	738, 475 7, 600 10. 8 48. 3	117, 358 3, 000 16. 3 64. 6	1,706,361 8,900 28.5 46.7
Fuel:					
Total gallons of gasoline consumed	6.5 13,310 6.0	53, 365 9, 4 3, 606 6, 2	67,793 10.7 2,271 5.5	9, 248 12.7 — — — —	168, 049 9.5 19, 187 6.0
Weight of goods carried:					
Total tons of goods carried '000 Average weight carried¹ ton		39, 049 4. 7	55, 582 1.6	2, 411 0. 9	133, 214 4. 2
Net ton miles:					
Total net ton miles performed'000 Average net ton miles per truck	2, 070, 671 124, 000	1, 093, 729 28, 500	598, 278 6, 200	39,331 1,000	3,802,009 19,900
Capacity ton miles:					
Total capacity ton miles <sup>2</sup>	3,837,542 229,800 54.0	2,774,736 72,300 39.4	1, 967, 462 20, 300 30, 4	152, 534 3, 900 25, 8	8,732,274 45,700 43.5
Gross ton miles:					
Total gross ton miles or truck '000  Average gross ton miles per truck	4, 455, 218 266, 800	2, 961, 174 77, 200	2, 643, 122 27, 300	255, 525 6, 500	10, 315, 039 54, 000
Revenue:					
Total revenue \$'000 Revenue per ton mile ¢ Revenue per mile (total mileage travelled) ¢ Average revenue per truck \$	169, 654 8. 2 52. 1 10, 200			_ _ _	=
Estimated annual population	16,700	38,379	96,721	39, 200	191,000

TABLE 2. All Trucks by Gross Vehicle Weight Group

	0-2½ tons 0-5,000 lb.	$2\frac{1}{2}$ - 5 tons 5,001-10,000 lb.	5 - 7½ tons 10,001-15,000 lb.	7½ - 10 tons 15,001-20,000 lb.	10 - 15 tons 20,001-30,000 lb.	Over 15 tons 30,001 lb. and over	Total
Mileage:							
Total mileage travelled'000 Average yearly mileage per truck Average distance each ton was carried Percentage of total mileage travelled empty	347,776 6,600 21.3 66.0	652, 965 7, 900 25, 4 53, 4	111,778 7,500 19.7 31.5	107, 093 8, 800 17, 1 29, 1	163, 400 11, 200 17. 0 34. 3	323, 349 22, 400 36. 9 30. 0	1,706,361 8,900 28.5 46.7
Fuel:							
Total gallons of gasoline consumed '000 Miles per gallon of gasoline Total gallons of diesel oil consumed '000 Miles per gallon of diesel oil Total gallons of other fuel consumed '000 Miles per gallon of other fuel	22, 983 15. 1 — — —	54, 271 12. 0 — — —	12, 667 8. 8 - - -	13,709 7.8 — — —	23, 530 6. 9 — — —	40, 889 5.1 19, 187 6.0	168, 049 9, 5 19, 187 6, 0
Weight of good carried:							
Total tons of goods carried '000 Average weight carried ton	1,644 0.3	7, 231 0, 6	7,639 2.0	13, 246 3. 0	30, 573 4. 8	72,881 11.9	133, 214 4. 2
Net ton miles:							
Total net ton miles performed	35, 080 700	183, 931 2, 200	150, 577 10, 100	227, 133 18, 700	519, 074 35, 500	2, 686, 214 185, 900	3,802,009 19,900
Capacity ton miles:							
Total capacity ton miles <sup>2</sup> '000 Average capacity ton miles per truck Percentage of capacity utilized	244, 681 4, 600 14. 3	848, 186 10, 300 21. 7	376, 518 25, 300 40. 0	573, 095 47, 100 39.6	1,391,386 95,100 37.3	5, 298, 408 366, 700 50. 7	8,732,274 45,700 43.5
Gross ton miles:							
Total gross ton miles	514, 908 9, 800	1,479,625 18,000	514, 450 34, 500	641, 178 52, 700	1,311,413 89,600	5, 853, 465 405, 100	10, 315, 039 54, 000
Fstimated annual population	52,646	82, 200	14, 909	12, 160	14,637	14, 448	191,000

TABLE 3. Selected Statistics by Gross Vehicle Weight Group

				For hire			
Gross vehicle weight	Weight of goods carried	goods travelled		Average weight carried	Average distance per ton	Total revenue	Revenue per ton mile
	'000 tons '000		'000	tons	miles	\$'000	¢
20,000 lb. and under	6,519 77,635		142, 224	1.8	21.8	46,312	32.6
20,001-30,000 lb	7,642	33,568	163,372	4.9	21.4	23,357	14.3
30,001-50,000 lb	12,685	51,636	442,272	8.6	34.9	40,364	9.1
50,001 lb. and over	9,326	88,597	1,322,803	14.9	141.8	59,621	4.5
Totals	36,172	251,436	2,070,671	8.2	57.2	169,654	8. 2
			Private intercity				
	Weight o goods carried	tre	al miles avelled ith load	Total net ton miles	wei	rage ght ried	Average distance per ton
	'000 ton	s	'000	'000	tos	ns	miles
10,000 lb. and under	1.	886	100, 593	59, 24	17	0.6	31.4
10,001-20,000 lb	4.	,649	36,744	102,16	19	2.8	22.0
20,001-30,000 lb	11	,315	42,429	255,42	20	6.0	22.6
30,001-50,000 lb	14	,788	33,586	325,55	55	9.7	22.0
50,001 lb. and over	6	,411	20,654	351,33	18	17.0	54.8
Totals	39	, 049	234, 006	1,093,72	:9	4.7	28.0

TABLE 4. Selected Statistics by Commodity Group

					For hire					
Commodity group	Weight of Total mile goods travelled with load		velled	Total net ton miles	Average weight carried	Average distance per ton	Total revenu	per per		venue ton ile
	'000 tons	'000		'000	tons	miles	\$'000			¢
Live animals	, 114	114 1,988		13,930	7.0	122. 1	1.	124		8.1
Food, feed, beverages and tobacco	5, 496	6	60, 137	437, 145	7.3	79.5	31, 4	178		7.2
Crude materials, inedible	11,407	1	16,740	192, 291	11.5	16.9	13,2	288		6.9
Fabricated materials, inedible	6,554	3	34,591	474, 246	13.7	72.4	29,0	012		6.1
End products, inedible	2,600	4	40,899	198, 217	4.8	76-2	27.	139		13.7
General freight	10,001	97, 081		754,842	7.8	75.5	5 67,6			9.0
Totals	36.172	251, 436		2, 070, 671	8.2	57.2	169.	854		8.2
				1	Private intercity					
	Weight of goods carried		tra	al miles welled h load	Private intercity  Total net ton miles	Ave	erage ight ried		Avera distan per to	ce
	goods		tra wit	al miles	Total net	Ave	ight		distan	ce on
Live animals	goods carried		tra wit	al miles welled h load	Total net ton miles	Ave we car	ight ried		distan per to	ce on
Live animals	goods carried	S	tra wit	al miles welled h load	Total net ton miles	Ave we can	ight ried ons		distan per to	ce on
	goods carried '000 ton	s 308	tra wit	al miles welled h load	Total net ton miles	Ave we can	ight ried ons 4.0		distan per to	70.3
Food, feed, beverages and tobacco	goods carried '000 ton 5	s 308 , 115	tra wit	al miles welled h load 000 5,439 89,017	Total net ton miles '000 21.63	Ave we car:	ight ried ons 4.0 2.8		distan per to	70.3 49.3
Food, feed, beverages and tobacco	goods carried '000 ton 5 23	308 , 115	tra wit	al miles welled h load 5,439 89,017 35,848	Total net ton miles '000 21,6: 252, 20 385,40	Ave we car to to 53 06 53	ight ried ons 4.0 2.8 10.8		distan per to	70.3 49.3 16.2
Food, feed, beverages and tobacco	goods carried '000 ton 5 23 7	308 , 115 ,761	tra wit	al miles welled h load 000 5,439 89,017 35,848 34,240	Total net ton miles '000 21,6: 252, 20 385,40 308,2:	Ave we car to to 13 3 3 3 06 53 73	ight ried ons 4.0 2.8 10.8 9.0		distan per to	70.3 49.3 16.2 41.9

#### SECTION II. TRAFFIC PERFORMED PY QUEPEC REGISTERED TRUCKS WITHIN THE PROVINCE JANUARY 1 - DECEMBER 31, 1962

TABLE 5. All Trucks by Type of Operation

				Private		PP - 4 - 1
		For hire	Intercity	Urban	Farm	Total
Mileage:						
Total mileage travelled Average yearly mileage per truck Average distance each ton was carried Percentage of total mileage travelled empty	'000	274, 065 16, 400 38.6 25. 2	505, 700 13, 200 25. 9 56. 3	738, 475 7, 600 10.8 48.3	117, 358 3, 000 16. 3 64. 6	1, 635, 598 8, 600 22. 8 48. 1
Fuel:						
Total gallons of gasoline consumed Miles per gallon of gasoline Total gallons of diesel oil consumed Miles per gallon of diesel oil Total gallons of other fuel consumed	,000 ,000	34, 229 6. 7 7, 565 6. 0	51, 492 9, 5 3, 108 6, 1	67, 793 10. 7 2, 27 1 5. 5	9, 248 12.7 — —	162, 762 9. 6 12, 944 5. 9
Miles per gallon of other fuel		-	_	_		_
Weight of good carried:						
Total tons of goods carried  Average weight carried <sup>1</sup>	'000 ton	36, 069 6. 8	38, 908 4. 6	55, 582 1. 6	2, 411 0. 9	132, 970 3. 6
Net ton miles:						
Total net ton miles performed	'000	1, 392, 136 83, 400	1, 007, 007 26, 200	598, 278 6, 200	39, 331 1, 000	3, 036, 752 15, 900
Capacity ton miles:						
Total capacity ton miles <sup>2</sup>	'000	2, 820, 568 168, 900 49, 3	2, 601, 691 67, 800 38. 7	1, 967, 462 20, 300 30. 4	152, 534 3, 900 25. 8	7, 542, 255 39, 500 40. 3
Gross ton miles:						
Total gross ton miles <sup>3</sup>	'000	3, 179, 093 190, 400	2, 768, 420 72, 100	2, 643, 122 27, 300	255, 525 6, 500	8, 846, 160 46, 300
Revenue:						
Total revenue  Revenue per ton mile  Revenue per mile (total mileage travelled)  Average revenue per truck	\$'000 ¢ ¢ \$	154, 684 11. 1 56. 4 9, 300	=	- - -		. =
Estimated annual population		16,700	38, 379	96,721	39, 200	191,000

TARLE 6 All Trucks by Gross Vehicle Weight Group

TABLE	0. All 11	TABLE 6. All Trucks by Gross venicle weight Group									
	$0 - 2\frac{1}{2} tons$ 0 - 5,000 1b.	2½ - 5 tons 5,001-10,000 lb.	5 - 7½ tons 10,001-15,000 lb.	7½ - 10 tons 15,001-20,000 lb.	10-15 tons 20,001-30,000 lb.	Over 15 tons 30,001 lb. and over	Total				
Mileage:											
Total mileage travelled	344, 387 6, 500 20. 7 66. 2	648, 525 7, 900 25. 4 53. 6	110, 573 7, 400 19. 4 31. 6	106, 626 8, 800 17. 1 29. 2	161, 037 11, 000 16. 7 34. 2	264, 450 18, 300 26. 6 33. 8	1, 635, 598 8, 600 22, 8 48, 1				
Fuel:											
Total gallons of gasoline consumed '000 Miles per gallon of gasoline '000 Total gallons of diesel oil consumed '000 Miles per gallon of diesel oil '000 Miles per gallon of other fuel '000 Miles per gallon of other fuel '000	22, 757 15. 1 — — —	53, 968 12. 0 — — — —	12, 513 8.8 — —	13, 652 7. 8 — — —	23, 205 6. 9 — — —	36, 667 5. 1 12, 944 5. 9	162, 762 9.6 12, 944 5.9				
Weight of goods carried:											
Total tons of goods carried '000 Average weight carried ton	1, 640 0. 3	7, 231 0. 6	7, 639 2. 0	13, 237 3. 0	30, 573 4. 8	72,650 11.0	132, 970 3. 6				
Net ton miles:											
Total net ton miles performed	34, 034 600	183, 582 2, 200	148, 334 9, 900	226, 124 18, 600	510, 994 34, 900	1, 933, 684 133, 800	3, 036, 752 15, 900				
Capacity ton miles:											
Total capacity ton miles 2	241, 105 4, 600 14. 1	842, 966 10, 300 21.8	371, 752 24, 900 39. 9	570, 772 46, 900 39. 6	1, 371, 056 93, 700 37. 3	4, 144, 604 286, 900 46. 7	7, 542, 255 39, 500 40. 3				
Gross ton miles:											
Total gross ton miles 3	508, 966 9, 700	1, 470, 412 17, 900	507,965 34,100	638, 452 52, 500	1, 291, 656 88, 200	4, 428, 709 306, 500	8, 846, 160 46, 300				
Estimated annual population	52, 646	82, 200	14, 909	12, 160	14, 637	14, 448	191,000				

<sup>1</sup> Net ton miles divided by miles travelled with load.
2 Capacity ton miles are determined by multiplying the actual number of miles travelled by the estimated capacity or the weight of the heaviest load carried, whichever is larger.
3 Gross ton miles performed are determined by adding to the total ton miles performed the weight of the vehicle empty (tare) multiplied by total

miles travelled.

## SECTION III. INTERPROVINCIAL AND INTERNATIONAL TRAFFIC PERFORMED BY QUEBEC REGISTERED TRUCKS JANUARY 1 - DECEMBER 31, 1962

TABLE 7. Tons of Goods Carried by Province of Origin and Destination

		For hire		Pri	ivate interci	ity	Total			
Origin and destination	Into Quebec	Out of Quebec	Total	Into Quebec	Out of Quebec	Total	Into Quebec	Out of Quebec	Total	
			<b>-</b>		'000 tons					
Newfoundland		1	1	_	-	-	_	1	1	
Prince Edward Island	1	1	2	-	_		1	1	2	
Nova Scotia	13	_	13	2	3	5	15	3	18	
New Brunswick	16	36	52	13	12	25	29	48	77	
Ontario	530	612	1,142	97	441	538	627	1,053	1,680	
Maritoba	8	8	. 16	-		anna .	8	8	16	
Saskatchewan	-			-	-		-		-	
Alberta	56	59	115	-	1	1	56	60	116	
British Columbia	-	_	_	-		-	-		-	
Yukon and Northwest Territories	_	_	-		-		-	******	-	
United States	107	162	269	70	236	306	177	398	575	
Totals	731	879	1,610	182	693	875	913	1,572	2,485	

TABLE 8. Selected Statistics by Commodity Group

For hire

Commodity group	Weight of goods carried	Total mi travelle with lo	d	Total net net miles	Average weight carried	Average distance per ton	Total revenue	Revenue per ton mile		
	'000 tons '00			'000	tons	miles	\$'000	¢		
Live animals	_			_	_	_	_	_		
Food, feed, beverages and tobacco	287	13,9	66	208,347	14.9	724.0	4,878	2,3		
Crude materials, inedible	125	2,0	51	32,339	15.8	258.6	1,066	3,3		
Fabricated materials, inedible	456	8,4	96	123,914	14.6	271.9	5,084	4.1		
End products, inedible	/ 215	7, 1	74	72,761	10.1	338.9	4,707	6.5		
General freight	527	19,952		296, 275	14.8	562.4	7,944	2.7		
Totals	1,610	51,639		733,636	14.2	455.7	23, 679	3, 2		
				Private intercity						
	Weight of goods carried	tra		miles lled load	Total net ton miles	Aver wei carr	ght	Average distance per ton		
	'000 ton	s	00	00	,000	to	ns	miles		
Live animals		8		279	2,50	66	9.2	331.3		
Food, feed, beverages and tobacco		166		5,324	37,0	68	7.0	222.8		
Crude materials, inedible		453		2,426	37,6	32	15.5	83.2		
Fabricated materials, inedible		180		2,391	31, 1	30	13.0	173.6		
End products, inedible		39		4,831	8, 2	11	1.7	209.1		
General freight		29		. 1, 296	8, 2	96	6.4	283.6		
Totals		875		16,547	124, 9	83	7.6	142.9		

#### APPENDIX

			A. Population							
Type of operation	0-2½ tons 0-5,000 lb.	2½-5 tons 5,001-10,000 lb.	5-7½ tons 10,001-15,000 lb.	7½-10 tons 15,001-20,000 lb.	10-15 tons 20,001-30,000 lb.	Over 15 tons 30,001 lb. and over	Total			
			Estimated Qu	ebec truck popu	lation in 1962					
For hire	403	3,002	2, 404	2, 786	3,016	5, 089	16,700			
Intercity	8,041	14,998	2, 603	2,872	5, 310	4, 555	38,379			
Urban	25, 963	45,661	8,053	6,002	6, 238	4,804	96,721			
Farm	18, 239	18,539	1,849	500	73	-	39, 200			
Totals	52, 646	82, 200	14, 909	12, 160	14, 637	14, 448	191,000			
	B. Survey Response									
	Total num trucks sel in samp	ected	Number of questionnaires eturned complete	trucks	ks reported not in   not		per of questionnaires returned or returned mplete and unusable			
For hire		4,742	2,	488	905		1, 349			
Private:										
Intercity		6, 190		701	1, 936		1, 553			
Urban		9,449		134	2,816		2, 499			
Farm		1, 356		561	371		424			
Totals		21, 737	9,	884	6, 028		5,825			

CATALOGUE No.

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# MOTOR TRANSPORT TRAFFIC PROVINCE OF QUEBEC

1963



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#### DOMINION BUREAU OF STATISTICS

Public Finance and Transportation Division
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53 - 222	Motor Carriers - Freight (Common and Contract) - Part I Classes 1 and 2 (approx. 32 pp.)  Number of companies, investment, operating revenues and expenses, employees, salaries and wages, equipment and accidents, by province, by revenue class and by type of operation	
53 - 223	Motor Carriers - Freight (Common and Contract) - Part II Classes 3 and 4 (approx. 16 pp.)  See above for description	.50
	Motor Transport Traffic	
	Each of the following series of eight annual reports provides	
	statistics on mileage, fuel consumption, truck capacity, goods carried, ton miles, revenues and number of trucks by type of operation and gross vehicle weight group.	
53 - 207	Motor Transport Traffic: National Estimates (approx. 30 pp.)	.50
53 - 208	Motor Transport Traffic: Atlantic Provinces (approx. 18 pp.)	.50
53 - 209	Motor Transport Traffic: Quebec (approx. 12 pp.)	.50
53-209F	Transport routiers de marchandises: Québec (approx. 12 pp.)	.50
53 - 210	Motor Transport Traffic: Ontario (approx. 13 pp.)	.50
53 - 211	Motor Transport Traffic: Manitoba (approx. 13 pp.)	.50
53 - 212	Motor Transport Traffic: Saskatchewan (approx, 13 pp.)	.50
53 - 213	Motor Transport Traffic: Alberta (approx, 14 pp.)	
53 - 214	Motor Transport Traffic: British Columbia (approx. 13 pp.)	.50

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# PROVINCE OF QUEBEC JANUARY I-DECEMBER 31,1963

CHART-I

#### TRUCK REGISTRATIONS BY TYPE OF OPERATION

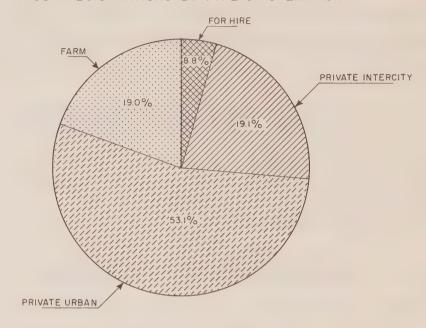
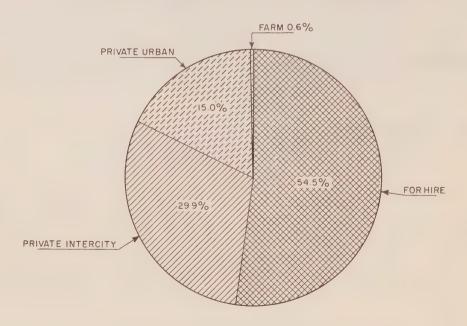


CHART-2

#### NET TON MILES BY TYPE OF OPERATION



#### INTRODUCTION

Farm

The 1963 annual report of motor transport traffic in the Province of Quebec is based upon a sample of approximately 10 per cent of trucks registered in the province. To allow for seasonal variations in traffic and to ensure that the selected vehicles represented current registrations the sample was selected in four quarterly segments with approximately one fourth of the total selected each quarter. Each quarterly sample was spread over three survey weeks with one third of the sample being used for a seven day period, Sunday through Saturday, per month. The surveys were therefore spread over twelve weeks during the year.

All trucks registered in the province are represented except: (a) those not engaged in transportation services; and (b) military and other government-owned vehicles. Trailers as such were excluded from the sample, but details of tractor-trailer combinations were obtained by including the power units or tractors in the survey.

Vehicles in the sample are stratified by type of operation and by gross vehicle weight group. The four functional categories used are: for hire, private intercity, private urban and farm. For hire vehicles are those operated for compensation or gain according to licence; private intercity vehicles are those owned and operated by firms and individuals on intercity routes to transport their own goods; private urban vehicles are those operated only within urban areas; and farm trucks are those operated by farmers primarily to transport farm produce and supplies.

In this report vehicles have been classified into the four functional categories as follows:

For hire - "L" licensed vehicles operated in intercity service and/or urban areas.

Private intercity - "F" licensed vehicles operated beyond urban areas.

Private urban - "F" licensed vehicles operated only within urban areas.

- "N" licensed vehicles.

Since Quebec motor vehicles are licensed on a tare weight basis, it was necessary to estimate equivalent gross vehicle weights to provide comparability with other annual provincial reports. For each truck in the sample the gross vehicle weight was estimated from the recorded tare weight and either the estimated carrying capacity or the weight of the heaviest load carried. The gross vehicle weight of each tractor-trailer combination was estimated from the tare weight of the tractor, the estimated tare weight of the trailer plus the weight of the heaviest load carried. It is emphasized that this method provides only approximately equivalent gross vehicle weights and therefore exact provincial comparability of the weight group classification cannot be assured.

Further information on the history and the organization of motor transport traffic surveys may be found in the reports entitled "Motor Transport Traffic, National Estimates", Catalogue No. 53-207, for 1957 to 1962.

#### **Expansion of Survey Results**

As this survey is conducted on a sample basis the data obtained for the vehicles included in the sample have to be expanded to represent the traffic of the total truck population. The methods used in this expansion of the raw data have been continually improved, Current procedures are:

- 1. A truck population has to be determined. As each sample is selected quarterly the number of trucks chosen in each sample multiplied by the inverse of the sample selection ratio provides an estimated quarterly population. Prior to 1959 the data for each quarterly sample were expanded to represent the total traffic of the estimated population of the same quarter. In 1959, however, it was decided that it would be preferable to expand data for the four quarterly surveys using a constant population. This constant population would be the peak quarterly population of the previous year calculated by multiplying the sample in each quarter by the inverse of the sample selection ratios.
- 2. The constant population has to be broken down into gross vehicle weight groups and functions. This is already partially done as sample selections are stratified by weight group. Therefore it is only necessary to multiply the sample in each weight group by the inverse of the appropriate selection ratio to arrive at a quarterly population broken down by weight group. The four quarterly populations by gross vehicle weight are added together and an average weight group distribution for the year is computed. This weight group distribution is applied to the constant population. The population then has to be distributed by function. The average distribution of "L" and "N" licensed vehicles for the four quarterly sample populations of the previous year are used as an estimate of the for hire and farm truck populations respectively. The average distribution obtained from the previous year's completed questionnaires is used to segregate "F" licensed vehicles into either the private intercity or private urban category. The above procedure was

introduced in 1959. Prior to that year the distribution by function was determined for each quarter separately.

- 3. When the constant population has been calculated and broken down by function and gross vehicle weight group, it is necessary to allocate vehicles included in current surveys in the same manner.
- 4. Expansion ratios for each gross vehicle weight group of each functional category are then calculated by determining for each breakdown the number of vehicles for which completed questionnaires were received or which were not in use during the survey period and dividing this sum into the constant population.
- 5. As the survey results for sample vehicles relate to one week's operations the expansion ratios calculated in (4) have to be multiplied by 13 to cover the three month period.

6. The expanded data for the four quarters are added together to arrive at an annual total.

While the changes and improvements in methods of compilation mentioned above will to some extent influence comparisons of data between years the effects should not be overly significant. In addition it is emphasized that since the statistics contained in this report are calculated from a sample survey they are only estimates and not actual figures.

It should be noted that in 1961 the description of commodities transported by trucks was changed to conform with the revised "Standard Commodity Classification" produced by the Dominion Bureau of Statistics. Formerly commodities were classified according to the "Railway Freight Commodity Statistics Classification". The change will enable these data to be compared more easily with other commodity data produced by the Dominion Bureau of Statistics.

#### **Review of Survey Results**

The estimated population of trucks performing transportation services in Quebec during the year rose 5.5 per cent to 201,600 from 191,000 in 1962. Of these 17,800 or 8.8 per cent were for hire trucks; 38,566 or 19.1 per cent were private intercity vehicles; 107,034 or 53.1 per cent were private vehicles operating wholly within urban areas; and 38,200 or 19.0 per cent were farm trucks.

In the following tables blanks appear for some breakdowns of diesel fuel and other fuel by type of operation and by gross vehicle weight. In most of these instances no vehicles were chosen belonging to these classifications in any of the quarterly sample selections. However in one or two cases a few vehicles were selected but the data collected were considered too unreliable to publish. Even where no vehicles were selected it does not necessarily follow that there were no vehicles in the province belonging to these classifications.

#### Section I: Traffic Inside and Outside the Province

Section I contains estimates of total traffic performed both inside and outside the province by Quebec registered trucks.

Although comprising only 8.8 per cent of Quebec's truck population, for hire vehicles accounted for 54.5 per cent of the total net ton miles and 28.5 per cent of the total tons of goods carried during 1963. This results from the high average yearly mileage of these trucks 20,300 miles as compared with 8,700 miles for all trucks, and from the heavy average load carried of 8.3 tons compared to 4.3 tons for all trucks. Since over fifty-five per cent of all for hire vehicles have a gross vehicle weight of over ten tons the heavier loads carried by these trucks are to be expected. The predom-

inance of heavier vehicles in the for hire class also explains the low estimate of miles per gallon of gasoline, 6.7 compared with 9.4 for all trucks. It is estimated that urban operations accounted for 12.9 per cent of the total net ton miles performed by Quebec registered for hire trucks and 2.8 per cent of the total net ton miles performed by private intercity vehicles.

Some trucks in Quebec under 10,000 lb. gross vehicle weight are used essentially for personal transportation. Such vehicles accounted for about 9.0 per cent of the total mileage travelled by Quebec registered trucks.

#### Section II: Traffic Inside the Province

This section presents estimates of traffic performed by Quebec registered trucks entirely inside the province and excludes the "outside the province" portion of interprovincial and international traffic as well as any traffic performed entirely outside the province. Comparing the data in Section I and Section II it will be noted that for hire vehicles accumulated 71.8 per cent and private intercity 90.3 per cent of their total net ton miles inside Quebec.

#### Section III: Interprovincial and International Traffic

Interprovincial and international traffic accounted for a significant proportion of the total traffic performed by for hire vehicles, representing approximately one third of the total net ton miles performed and one seventh of the revenue earned by these vehicles. About two thirds of the total tons of goods carried in this type of traffic by Quebec registered for hire trucks was transported to or from Ontario and one fifth to or from the United States.

#### **Appendix**

During the year survey questionnaires were sent to the owners or operators of 20,788 trucks. Of this number 8,595 were returned completed and 5,084 trucks were reported not used during the

survey week. The remaining 7,109 were either returned incomplete and unusable or not returned at all.

February 8, 1965.

## SECTION I. TRAFFIC PERFORMED BY QUEBEC REGISTERED TRUCKS INSIDE AND OUTSIDE THE PROVINCE JANUARY 1 - DECEMBER 31, 1963

TABLE 1. All Trucks by Type of Operation

			Delevet		
	For hire		Private		Total
		Intercity	Urban	Farm	
Mileage:					
Total mileage travelled	361,007 20,300 52.7 23.5	532, 854 13, 800 32, 5 50, 9	752, 206 7, 000 9, 2 45, 3	112,666 2,900 13,7 64,7	1,758,733 8,700 27.5 43.8
Fuel:					
Total gallons of gasoline consumed	40, 494 6, 7 15, 834 5, 6	54, 369 9, 2 5, 560 6, 0	69,010 10,7 2,277 5,0	8,675 13,0 — — — —	172, 548 9, 4 23, 671 5, 6
Weight of goods carried:	}				
Total tons of goods carried	43, 592 8, 3	38,736 4,8	68,798 1,5	1,854 0,6	152, 980 4, 3
Net ton miles:					
Total net ton miles performed	2, 297, 979 129, 100	1, 259, 958 32, 700	630,669 5,900	25,391 700	4, 213, 997 20, 900
Capacity ton miles:					
Total capacity ton miles²	4, 467, 076 251, 000 51, 4	3, 265, 628 84,700 38, 6	2, 182, 992 20, 400 28, 9	130,699 3,400 19,4	10,046,395 49,800 41,9
Gross ton miles:					
Total gross ton miles a '000 Average gross ton miles per truck	4,943,321 277,700	3,376,014 87,500	2,663,522 24,900	234,691 6,100	11, 217, 548 55, 600
Revenue:					
Total revenue	202, 555 8, 8 56, 1 11, 400	-	-	<u>-</u>	Ē
Estimated annual population	17,800	38, 566	107,034	38, 200	201, 600

TABLE 2. All Trucks by Gross Vehicle Weight Group

	0-2½ tons 0-5,000 1b.	2½-5 tons 5,001-10,000 1b.	5-7½ tons 10,001-15,000 lb.	7½-10 tons 15,001-20,000 lb.	10-15 tons 20,001-30,000 lb.	Over 15 tons 30,001 lb. and over	Total
Mileage:							
Total mileage travelled	318, 926 5, 800 16, 3 57, 0	644, 047 7, 500 18, 6 52, 7	105, 303 7, 500 14, 6 32, 1	103, 195 8, 500 13, 4 29, 5	201,973 11,400 17,4 31,5	385, 289 22, 600 35, 7 31, 3	1,758,733 8,700 27,5 43,8
Fuel:							
Total gallons of gasoline consumed	20, 817 15, 3 — — —	53,035 12,1 — — —	11,573 9,1 — — — —	13, 763 7.5 — — —	27,788 7,3 - - - -	45,572 5,5 23,671 5,6 —	172, 548 9, 4 23, 671 5, 6
Weight of goods carried:							
Total tons of goods carried	1,540 0,2	7, 383 0, 5	6,971 1,4	12, 932 2, 4	35, 796 4, 5	88,358 11,9	152, 980 4, 3
Net ton miles:							
Total net ton miles performed	25, 149 500	137, 307 1, 600	101,544 7,200	173, 296 14, 300	621,072 35,100	3, 155, 629 185, 300	4, 213, 997 20, 900
Capacity ton miles:							
Total capacity ton miles	227,722 4,100 11,0	824, 628 9, 600 16, 7	345, 196 24, 600 29, 4	550,746 45,600 31.5	1,717,143 97,000 36,2	6,380,960 374,800 49,5	10,046,395 49,800 41,9
Gross ton miles:							
Total gross ton miles 3 '000 Average gross ton miles per truck	460, 255 8, 400	1,414,903 16,500	443, 116 31, 600	567, 524 47, 000	1,571,662 88,700	6,760,088 397,000	11, 217, 548 55, 600
Estimated annual population	55,025	85,737	14,018	12,082	17,711	17,027	201,600

TABLE 3. Selected Statistics by Gross Vehicle Weight Group

	For hire										
Gross vehicle weight	Weight of goods carried	goods travelled		velled ton		Average weight carried	Average distance per ton	Total revenue		Revenue per ton mile	
	'000 tons	'0	000	0000		tons	miles	\$'0	000	¢	
20,000 lb. and under	6, 213	,	71,771	114,60	00	1.6	18.4	3	6,375	31.7	
20,001-30,000 lb	11,142	4	49,840	211, 8'	75	4.3	19.0	3	6,779	17.4	
30,001 - 50,000 lb.	12, 240	4	46,391	369, 5	14	8.0	30.2	3	7, 935	10.3	
50,001 lb. and over	13,997	108, 126		1,601,99	90	14.8	114.5	9	1,466	5.7	
Totals	43, 592	276, 128		2, 297, 979		8.3	52.7	202, 555		8.8	
					Pi	rivate intercity					
	Weight of goods carried	goods tra		Total miles travelled with load		Total net ton miles	Average weight carried		Average distance per ton		
	'000 tons		9 (	'000		'000	tons			miles	
10,000 lb. and under	1	, 503		99, 576		45,091	0			30.0	
10,001-20,000 lb.	. 3	,710		39, 262		84, 143		2.1		22.7	
20,001 - 30,000 lb	9	, 453		50, 589		275,346		5.4		29.1	
30,001-50,000 lb.	15	, 455		45, 444		429, 521		9.5		27. 8	
50,001 lb. and over	8	,615		26, <b>6</b> 53		425,857		16.0		49.4	
Totals	38	, 736		261, 524		1, 259, 958		4.8		32, 5	

TABLE 4. Selected Statistics by Commodity Group

						For hire					
Commodity group	Weight of goods carried	Total miles travelled with load		Total net ton miles		Average weight carried	Average distance per ton	To:		Revenue per ton mile	
	'000 tons	,000		'000		tons	miles	\$'(	000	¢	
Live animals	220	3, 538		18,7	01	5.3	84.8		1,897	10.1	
Food, feed, beverages and tobacco	5,928		47, 491	397,3	08	8.4	67.0	2	9,747	7.5	
Crude materials, inedible	12,271	17, 350		220, 8	38	12.7	18.0	1	3, 855	6.3	
Fabricated materials, inedible	8,911	41,367		610,9	02	14.7	68.6	3	8,357	6.3	
End products, inedible	2,748	53,413		196, 7	70	3.7	71.6	3	0,228	15.4	
General freight	13, 514	112,969		853,46		7.6	63.2	8	8, 471	10.4	
Totals	43, 592	276, 128		2, 297, 979		8, 3	52.7	202, 555		8.8	
					P	rivate intercity					
	Weight of goods carried		trav	Total miles travelled with load		Total net ton miles	Average weight carried			Average listance per ton	
	'000 tons		*	000		'000	tons			miles	
Live animals		229		4, 490		18, 535		4.1		80.9	
Food, feed, beverages and tobacco	5,	670		101,378		285, 749		2.8		50.4	
Crude materials, inedible	21,	125		41,415		458,319		11.1		21.7	
Fabricated materials, inedible	7	7,668 36,270 331,347 9.		9.1		43.2					
End products, inedible	1,	1,584 53,916 96,985			1.8		61.2				
General freight	2,	2,460 24,055 69,023 2.		2.9		28.1					
Totals	38,	736		261, 524	261, 524 1, 259, 9			4. 8		32.5	

#### SECTION II, TRAFFIC PERFORMED BY QUEBEC REGISTERED TRUCKS WITHIN THE PROVINCE JANUARY 1 - DECEMBER 31, 1963

TABLE 5. All Trucks by Type of Operation

	For hire		Private					
	roi mie	Intercity	Urban	Farm	Total			
Mileage:								
Total mileage travelled	0 310,704 17,500 37.9 25.5	515,097 13,400 29.5 51.1	752, 206 7, 000 9, 2 45, 3	112,666 2,900 13.7 64.7	1,690,673 8,400 22.6 44.8			
Fuel:								
Total gallons of gasoline consumed	7.0	52, 284 9. 3 4, 717 6. 1	69,010 10.7 2,277 5.0	8.675 13.0 — — —	165, 767 9. 6 17, 857 5. 7			
Weight of goods carried:								
Total tons of goods carried '00 Average weight carried' to		38, 514 4. 6	68,798 1.5	1,854 0.6	152, 677 3. 7			
Net ton miles:								
Total net ton miles performed	0 1,651,060 92,800	1, 137, 578 29, 500	630,669 5,900	25,391 700	3,444,698 17,100			
Capacity ton miles:								
Total capacity ton miles	3,491,467 196,200 47,3	3,011,714 78,100 37.8	2, 182, 992 20, 400 28, 9	130,699 3,400 19.4	8,816,872 43,700 39.1			
Gross ton miles:								
Total gross ton miles 3	3,716,666 208,800	3, 108, 804 80, 600	2,663,522 24,900	234,691 6,100	9,723,683 48,200			
Revenue:								
Total revenue \$'00 Revenue per ton mile \$ Revenue per mile (total mileage travelled) \$ Average revenue per truck \$	180,312 10.9 58.0 13,000		-					
Estimated annual population	17,800	38,566	107,034	38, 200	201,600			

TABLE 6. All Trucks by Gross Vehicle Weight Group

	0-2½ tons 0-5,000 1b.	2½-5 tons 5,001-10,000 lb.	5-7½ tons 10,001-15,000 1b.	7½-10 tons 15,001-20,000 lb.	10-15 tons 20,001-30,000 1b.	Over 15 tons 30,001 lb. and over	Total
Mileage:							
Total mileage travelled	318,878 5,800 16.3 57.0	643,725 7,500 18.6 52.7	104, 161 7, 400 14. 4 32. 0	102,889 8,500 13.5 29.4	197,744 11,200 16.9 31.4	323, 276 19, 000 27, 3 34, 5	1,690,673 8,400 22.6 44.8
Fuel:							
Total gallons of gasoline consumed	20,815 15.3 — — —	53,008 12.1 — — —	11, 439 9. 1 — — — —	13,706 7.5 — — —	27, 245 7. 3 — — —	39,554 5.6 17,857 5.7 —	165,767 9.6 17,857 5.7
Weight of goods carried:							
Total tons of goods carried '000 Average weight carried ton	1,540 0.2	7,383 0.5	6,970 1.4	12,805 2.4	35,790 4.5	88, 189 11. 4	152,677 3.7
Net ton miles:							
Total net ton miles performed	25, 149 500	137, 307 1, 600	100,585 7,200	172,643 14,300	605, 626 34, 200	2,403,388 141,200	3, 444, 698 17, 100
Capacity ton miles:							
Total capacity ton miles 2	227,679 4,100 11.0	824, 325 9, 600 16. 7	341,786 24,400 29.4	549,075 45,400 31.4	1,680,326 94,900 36.0	5, 193, 681 305, 000 46. 3	8,816,872 43,700 39.1
Gross ton miles:							
Total gross ton miles 3	460, 212 8, 400	1,414,271 16,500	438, 342 31, 300	565, 785 46, 800	1, 536, 131 86, 700	5, 308, 942 311, 800	9,723,683 48,200
Estimated annual population	55,025	85,737	14,018	12,082	17,711	17,027	201,600

<sup>&</sup>lt;sup>1</sup> Net ton miles divided by miles travelled with load.

<sup>2</sup> Capacity ton miles are determined by multiplying the actual number of miles travelled by the estimated capacity or the weight of the heaviest load carried, whichever is larger.

<sup>3</sup> Gross ton miles performed are determined by adding to the total ton miles performed the weight of the vehicle empty (tare) multiplied by total miles travelled.

## SECTION III. INTERPROVINCIAL AND INTERNATIONAL TRAFFIC PERFORMED BY QUEBEC REGISTERED TRUCKS JANUARY 1 - DECEMBER 31, 1963

TABLE 7. Tons of Goods Carried by Province of Origin and Destination

		For hire		Pr	ivate interc	ity	Total			
Origin and destination	Into Quebec	Out of Quebec	Total	Into Quebec	Out of Quebec	Total	Into Quebec	Out of Quebec	Total	
		'000 tons								
Newfoundland	_	_	-	_	-		-	_	_	
Prince Edward Island	6	9	15	_			6	9	15	
Nova Scotia	4	12	16	_			4	12	16	
New Brunswick	27	92	119	4	11	15	31	103	134	
Ontario	604	691	1, 295	165	407	572	769	1,098	1,867	
Manitoba	15	16	31	_	_	_	15	16	31	
Saskatchewan	_	_	-		_	_	_		_	
Alberta	24	24	48		_	_	24	24	48	
British Columbia		_	-	_		-	_	_	-	
Yukon and Northwest Territories	_	_		-	_		-	_	_	
United States	209	219	428	127	191	318	336	410	746	
Totals	889	1,063	1, 952	296	609	905	1, 185	1,672	2,857	

TABLE 8. Selected Statistics by Commodity Group

	For hire										
Commodity group	Weight of goods carried	Total miles travelled with load		Total ne net miles	t	Average weight carried	Average distrance per ton	Torreve		Revenue per ton mile	
	'000 tons	'0	000	'000		tons	miles	\$'0	00	¢	
Live animals			_	_		-			_	_	
Food, feed, beverages and tobacco	385	1	1, 598	179, 76	68	15.5	467.0		5,519	3.1	
Crude materials, inedible	131		1,830	31, 7	11	17.3	242.0		836	2.6	
Fabricated materials, inedible	472		7, 799	125, 35	59	16.1	265.9		5,311	4.2	
End products, inedible	266		8,701	79,42	24	9.1	298. 2		5,460	6.9	
General freight	698	21, 796		298, 4	77	13.7	427.4	13	2, 088	4.0	
Totals	1, 952	51, 724		714, 73		13.8	366.1	29, 214		4.1	
					Pr	ivate intercity					
	Weight of goods carried		tra	al miles velled h load	Total net ton miles		Average weight carried			Average listance per ton	
	'000 tons	S	,	000		'000	tons	3		miles	
Live animals		-		_		_		_		_	
Food, feed, beverages and tobacco		325		4.777		50, 862		10.6		225. 4	
Crude materials, inedible		283		2,533		30, 813		12.2		109.0	
Fabricated materials, inedible		285		4,512		50,773		11.3		178.1	
End products, inedible		85		2,952		21,059		7.1		248.9	
General freight		27		880		6,037		6.9		226.6	
Totals		905		15, 654		159, 544		10. 2	8	176.3	

#### APPENDIX

		A. Population								
Type of operation	0-2½ tons 0-5,000 lb.	2½-5 tons 5,001-10,000 lb.	5-7½ tons 10,001-15,000 1b.	7½-10 tons 15,001-20,000 lb.	10-15 tons 20,001-30,000 lb.	Over 15 tons 30,001 lb. and over	Total			
			Estimated Qu	ebec truck popul	lation in 1963					
For hire	643	2,417	1,930	2,681	4,551	5,578	17,800			
Private:	043	2,411	1,930	2,081	4,001	5,516	11,600			
Intercity	6,343	15,246	3,290	2,473	5,830	5,384	38, 566			
Urban	30,594	49, 435	7, 224	6,403	7,313	5,065	107,034			
Farm	17,445	18,639	1,574	525	17	-	38,200			
Totals	55, 025	85, 737	14, 018	12,082	17,711	17,027	201, 600			
			E	. Survey Respon	se					
	Total num trucks sel in samp	ected	Number of questionnaires eturned complete	trucks r	r of sampled eported not in g survey week	not returned	nestionnaires or returned and unusable			
For hire		4,570	2,2	20	774		1,576			
Private:										
Intercity		5,385	2,1	49	1,449		1.787			
Urban		9,677	3,8	54	2,545		3, 278			
Farm		1,156	3	72	316		468			
Totals		20, 788	8, 5	95	5, 084		7, 109			



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# MOTOR TRANSPORT TRAFFIC PROVINCE OF QUEBEC

1964



Published by Authority of The Minister of Trade and Commerce

#### DOMINION BUREAU OF STATISTICS

Public Finance and Transportation Division

Transportation Section

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## PROVINCE OF QUEBEC JANUARY I - DECEMBER 31, 1964

CHART-I

#### TRUCK REGISTRATIONS BY TYPE OF OPERATION

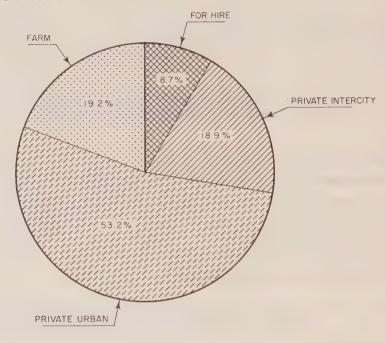
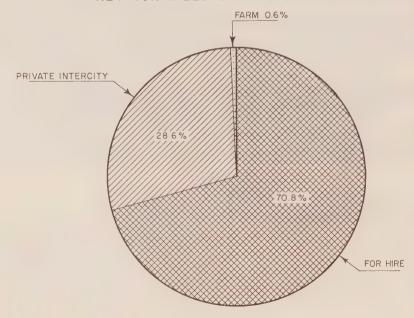


CHART-2

#### NET TON MILES BY TYPE OF OPERATION



#### INTRODUCTION

The 1964 annual report of motor transport traffic in the Province of Quebec is based upon a sample of approximately 8 per cent of trucks registered in the province. To allow for seasonal variations in traffic and to ensure that the selected vehicles represented current registrations the sample was selected in four quarterly segments with approximately one fourth of the total selected each quarter. Each quarterly sample was spread over three survey weeks with one third of the sample being used for a seven day period, Sunday through Saturday, per month. The surveys were therefore spread over twelve weeks during the year.

All trucks registered in the province are represented except: (a) those not engaged in transportation services; and (b) military and other government-owned vehicles. Trailers as such were excluded from the sample, but details of tractor-trailer combinations were obtained by including the power units or tractors in the survey.

Vehicles in the sample are stratified by type of operation and by gross vehicle weight group. The four functional categories used are: for hire, private intercity, private urban and farm. For hire vehicles are those operated for compensation or gain according to licence; private intercity vehicles are those owned and operated by firms and individuals on intercity routes to transport their own goods; private urban vehicles are those operated only within urban areas; and farm trucks are those operated by farmers primarily to transport farm produce and supplies.

In this report vehicles have been classified into the four functional categories as follows:

For hire

-"L" licensed vehicles operated in intercity service and/or urban areas. Private intercity—"F" licensed vehicles operated beyond urban areas.

Private urban - "F" licensed vehicles operated only within urban areas.

Farm - "N" licensed vehicles.

Since Quebec motor vehicles are licensed on a tare weight basis, it was necessary to estimate equivalent gross vehicle weights to provide comparability with other annual provincial reports. For each truck in the sample the gross vehicle weight was estimated from the recorded tare weight and either the estimated carrying capacity or the weight of the heaviest load carried. The gross vehicle weight of each tractor-trailer combination was estimated from the tare weight of the tractor, the estimated tare weight of the trailer plus the weight of the heaviest load carried. It is emphasized that this method provides only approximately equivalent gross vehicle weights and therefore exact provincial comparability of the weight group classification cannot be assured.

Beginning in 1964 the only data recorded for vehicles performing **urban** or **local** operations, regardless of category, are **miles travelled** and **gallons of fuel used** and the estimated population. For this reason the 1964 figures shown under various traffic headings are not comparable to the statistics published for 1963.

Further information on the history and the organization of motor transport traffic surveys may be found in the reports entitled "Motor Transport Traffic, National Estimates", Catalogue No. 53-207, for 1957 to 1963.

#### **Expansion of Survey Results**

As this survey is conducted on a sample basis the data obtained for the vehicles included in the sample have to be expanded to represent the traffic of the total truck population. The methods used in this expansion of the raw data have been continually improved. Current procedures are:

- 1. A truck population figure which remains constant for all four quarterly surveys is determined. This constant population is the peak figure of the previous year's quarterly sample population estimates. These estimates are made by multiplying the sample size in each quarter by the inverse of the sample selection ratios.
- 2. The constant population has to be broken down into gross vehicle weight groups and functions. Therefore it is necessary to multiply the quarterly sample in each weight group by the inverse of the

appropriate selection ratio to arrive at a quarterly population broken down by weight group. The four quarterly populations by gross vehicle weight are added together and an average weight group distribution for the year is computed. This weight group distribution is applied to the constant population. The population then has to be distributed by function. The average distribution of "L" and "N" licensed vehicles for the four quarterly sample populations of the previous year are used as an estimate of the for hire and farm truck populations respectively. The average distribution obtained from the previous year's completed questionnaires is used to segregate "F" licensed vehicles into either the private intercity or private urban category. Prior to 1959 the distribution by function was determined for each quarter separately.

- 3. When the constant population has been calculated and broken down by function and gross vehicle weight group, it is necessary to allocate vehicles included in current surveys in the same manner.
- 4. Expansion ratios for each gross vehicle weight group of each functional category are then calculated by determining for each breakdown the number of vehicles for which completed questionnaires were received or which were not in use during the survey period and dividing this sum into the constant population.
- 5. As the survey results for sample vehicles relate to one week's operations the expansion ratios calculated in (4) have to be multiplied by 13 to cover the three month period.
- 6. The expanded data for the four quarters are added together to arrive at an annual total.

While the changes and improvements in methods of compilation mentioned above will to some extent influence comparisons of data between years the effects should not be overly significant. In addition it is emphasized that since the statistics contained in this report are calculated from a sample survey they are only estimates and not actual figures.

It should be noted that in 1961 the description of commodities transported by trucks was changed to conform with the revised "Standard Commodity Classification" produced by the Dominion Bureau of Statistics. Formerly commodities were classified according to the "Railway Freight Commodity Statistics Classification". The change will enable these data to be compared more easily with other commodity data produced by the Dominion Bureau of Statistics.

#### **Review of Survey Results**

The estimated population of trucks performing transportation services in Quebec during the year rose 2.9 per cent to 207,500 from 201,600 in 1963. Of these 18,000 or 8.7 per cent were for hire trucks; 39,278 or 18.9 per cent were private intercity vehicles; 110,422 or 53.2 per cent were private vehicles operating wholly within urban areas; and 39,800 or 19.2 per cent were farm trucks.

In the following tables blanks appear for some breakdowns of diesel fuel and other fuel by type of operation and by gross vehicle weight. In most instances an insufficient number of vehicles were chosen in these categories to produce reliable statistics. However, it does not necessarily follow that there were no vehicles in the province relating to these classifications.

#### Section I: Traffic Inside and Outside the Province

Section I contains estimates of total traffic performed both inside and outside the province by Quebec registered trucks.

Although comprising only 8.7 per cent of Quebec's truck population, for hire vehicles accounted for 70.8 per cent of the total net ton miles (excluding the urban portion) and 39.3 per cent of the total tons of goods (excluding urban) carried during 1964. This results from the high average yearly mileage of these trucks, 21,100 miles as compared with 8,800 miles for all trucks, and from the heavy average load carried of 12:1 tons compared to 7.9 tons for all trucks. Since over one half of all for hire vehicles have a gross vehicle weight of over ten tons the heavier loads carried by these trucks are to be expected. The predominance of heavier vehicles in the for hire class also explains the low estimate of miles per gallon of gasoline, 6.5 compared with 9.3 for all trucks.

Some trucks in Quebec under 10,000 lb. gross vehicle weight are used essentially for personal transportation. Such vehicles accounted for about 9 per cent of the total mileage travelled by Quebec registered trucks.

#### Section II: Traffic Within the Province

This section presents estimates of traffic performed by Quebec registered trucks entirely inside the province and excludes the "outside the province" portion of interprovincial and international traffic as well as any traffic performed entirely outside the province. Comparing the data in Section I and Section II it will be noted that for hire vehicles accumulated 48.6 per cent and private intercity 89.8 per cent of their total net ton miles inside Quebec.

#### Section III: Interprovincial and International Traffic

Interprovincial and international traffic accounted for a significant proportion of the total traffic performed by for hire vehicles, representing approximately 44 per cent of the total net ton miles performed and 29 per cent of the revenue earned by these vehicles. Over two thirds of the total tons of goods carried in this type of traffic by Quebec registered for hire trucks was transported to or from Ontario and one sixth to or from the United States.

#### **Appendix**

The appendix contains a summary of the estimated truck population in 1964 by gross vehicle weight group.

## SECTION I. TRAFFIC PERFORMED BY QUEBEC REGISTERED TRUCKS INSIDE AND OUTSIDE THE PROVINCE JANUARY 1 - DECEMBER 31, 1964

TABLE 1. Total Operations (Intercity, Rural and Urban) of All Trucks

	*** 1-/		Private		
	For hire	Intercity	Urban	Farm	Total
Mileage:					
Total mileage travelled'000	379,023	492, 946	829, 534	115, 152	1,816,65
Average yearly mileage per truck	21, 100	12,600	7,500	2,900	8, 800
Revenue per mile (total mileage travelled) ¢	35.9	-	-	don	eder
Fuel:					
Total gallons of gasoline consumed'000	40,644	47,049	81,686	8,868	178, 24
Miles per gallon of gasoline	6.5	10.0	9.9	13.0	9. :
Total gallons of diesel oil consumed'000	19,971	3,983	4, 154	~	28, 108
Miles per gallon of diesel oil	5.6	5.8	4.4	-	5. !
Total gallons of other fuel consumed '000	_	10	105		. 11
Miles per gallon of other fuel	_ '	5.5	2. 6	-	8.
Estimated annual population	18,000	39,278	110, 422	39, 800	207, 50

TABLE 1 A. Intercity and Rural Operations Only of For Hire, Private Intercity and Farm Trucks

			Priva	ate	FF-4-3
		For hire	Intercity	Farm	Total
Mileage:					
	000	379, 023	492,946	115, 152	987, 121
Percentage of total mileage travelled empty	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	45.9	57. 2	74.1	54.8
Weight of goods carried:					
Total tons of goods carried'(	000	18,895	27, 380	1,808	48,083
Average weight carried <sup>1</sup> t	ton	12. 1	4.8	0.7	7.9
Average distance each ton was carried		131. 2	36.6	11.6	72.8
Net ton miles:					
Total net ton miles performed	000	2, 479, 339	1,001,856	20,943	3, 502, 138
Average net ton miles per truck		137,700	25,500	500	36, 100
Capacity ton miles:					
Total capacity ton miles <sup>2</sup> '(	000	4, 388, 126	2,623,412	139, 191	7, 150, 729
Average capacity ton miles per truck		243,800	66,800	3, 500	73, 700
Percentage of capacity utilized		56.5	38.2	15.0	49.0
Gross ton miles:					
Total gross ton miles <sup>3</sup> '(	000	4,902,904	2,692,095	232, 357	7,827,356
Average gross ton miles per truck		272,400	68, 500	5, 800	80,600
Revenue:					
Total revenue\$'C	000	135, 953	_	_	_
Revenue per ton mile	¢	5.5	-	_	_
Average revenue per truck	\$	7,600	dept	***	-
Estimated annual population		18,000	39,278	39,800	97, 07

See footnotes at end of Table 6 A, page 11.

Note: Table 1A excludes the operations of vehicles in the urban category and the urban operations of for hire and private intercity vehicles (except mileage). For further explanation of the difference between Table 1 and Table 1A, see page 5, paragraph 6 of text.

TABLE 2. Total Operations (Intercity, Rural and Urban) of All Trucks by Gross Vehicle Weight Group

	0-2½ tons 0-5,000 lb.		5-7½ tons 10,001-15,000 1b.	7½-10 tons 15,001-20,000 lb.	10-15 tons 20,001-30,000 lb.	Over 15 tons 30,001 lb. and over	Total
Mileage:							
Total mileage travelled'000	344,922	681, 123	116,406	116,444	179,848	377,912	1,816,655
Average yearly mileage per truck	6,000	7,500	7,700	9,100	11,600	24, 400	8,800
Fuel:							
Total gallons of gasoline consumed'000	24, 461	57,924	12,825	15, 284	25,488	42,265	178, 247
Miles per gallon of gasoline	14. 1	11.8	9.0	7.6	7.0	5.4	9.3
Total gallons of diesel oil consumed '000	89		193	-	281	27,545	28, 108
Miles per gallon of diesel oil	7.2		5.5	_	8.7	5.4	5. 5
Total gallons of other fuel consumed '000	_	_		_	_	115	115
Miles per gallon of other fuel	_	-	-	-	_	8.5	8.5
Estimated annual population	57,476	91,042	15, 128	12,827	15,542	15, 485	207, 500

TABLE 2 A. Intercity and Rural Operations Only of For Hire, Private Intercity and Farm Trucks by Gross Vehicle Weight Group

	0-2½ tons 0-5,000 lb.	2½-5 tons 5,001-10,000 lb.	5-7½ tons 10,001-15,000 lb.	7½-10 tons 15,001-20,000 lb.	10-15 tons 20,001-30,000 lb.	Over 15 tons 30,001 lb. and over	Total
Mileage:							
Total mileage travelled'000	145,946	268,251	56,816	69,307	130,000	316,801	987, 121
Percentage of total mileage travelled empty	75.0	69.7	63.5	55, 4	49.0	33.6	54. 8
Weight of goods carried:							
Total tons of goods carried'000	864	2,068	1, 183	3,405	10,808	29,755	48,083
Average weight carried1 ton	0.3	0.6	2. 2	3.6	5.4	13.9	7.9
Average distance each ton was carried	13.4	23.4	39.1	32.9	32.9	98.4	72.8
Net ton miles:							
Total net ton miles performed'000	11,542	48,498	46, 240	112,004	355,398	2,928,456	3, 502, 138
Average net ton miles per truck	400	1,300	6,900	18, 100	40,700	301,400	36,100
Capacity ton miles:							
Total capacity ton miles <sup>2</sup> '000	107, 545	297,514	143,114	270,601	916, 965	5, 414, 990	7, 150, 729
Average capacity ton miles per truck	3,800	7,900	21,200	43,700	105, 100	557,400	73,700
Percentage of capacity utilized	10.7	16.3	32.3	41.4	38.8	54. 1	49. (
Gross ton miles:							
Total gross ton miles <sup>3</sup> '000	206, 249	495,096	166, 334	293, 663	853, 618	5,812,396	7,827,356
Average gross ton miles per truck	7,400	13, 100	24,600	47, 400	97, 900	598,300	80,600
Estimated annual population	27, 985	37,707	6,750	6, 198	8,723	9,715	97,078

See footnotes at end of Table 6 A, page 11.

Note: Table 2 A excludes the operations of vehicles in the urban category and the urban operations of for hire and private intercity vehicles (except mileage). For further explanation of the difference between Table 2 and Table 2 A, see page 5, paragraph 6 of text.

TABLE 3. Selected Statistics by Gross Vehicle Weight Group

					For hire				
Gross vehicle weight	Weight of goods carried	goods travelled ton weight distance T		Total revenu		Revenue per ton mile			
	'000 tons	,	000	'000	tons	miles	\$'000		¢
0,000 lb. and under	1, 111		15,662	48, 94	3 3.1	44.0	9,	218	18.
0,001-30,000 lb	3, 599		28,088	137, 57	7 4.9	38.2	18,	444	13.
0,001-50,000 "	4,859		37,716	285,53	1 7.6	58.8	25,	780	9.
0,001 lb. and over	9,326	1	123,674	2,007,28	8 16.2	215.2	82,	511	4.
Totals	18, 895	2	205, 140	2, 479, 33	9 12.1	131. 2	135,	953	5.
					Private intercity				
	Weight of goods carried			it	Average distance per ton				
	'000 tons		,(	000	'000	tons			miles
0,000 lb. and under	1,	364		89,732	45, 140	)	0.5		33.
0,001 - 20,000 lb	3,	, 237		34, 097	103, 258	3	3.0		31.
0,001-30,000 "	7,	, 209		38, 240	217, 821		5.7		30.
0,001 - 50,000 **	8,	, 338		28,611	277, 249		9.7		33.
0,001 lb. and over	7,	, 232		20,219	358,388		17.7		49.
Totals	27,	, 380		210, 899	1,001,850	3	4.8		36.

TABLE 4. Selected Statistics by Commodity Group

For hire

Commodity group	Weight of goods carried	tra	al miles velled th load	Total net ton miles	Average weight carried	Average distance per ton	Tot		Revenue per ton mile
	'000 tons	,	000	'000	tons	miles	\$'00	00	¢
Live animals	248		3,902	28, 74	7.4	115.9		5,217	18, 1
Food, feed, beverages and tobacco	4,351		49,510	569,35	11.5	130, 9	26	6,842	4.7
Crude materials, inedible	4,466		13,526	213, 17	3 15.8	47.7		9, 664	4.5
Fabricated materials, inedible	5, 196		37, 115	603,10	7 16.2	116.1	29	9,212	4.8
End products, inedible	1,515	ĺ	34,940	225,09	6.4	148.6	26	0,975	9, 3
General freight	3,119		66, 147	839, 86	1 12.7	269.2	4	1,043	5.2
Totals	18, 895	2	205, 140	2, 479, 33	9 12. 1	131. 2	135	5, 953	5, 5
		<u> </u>		L	Private intercity				
	Weight of goods carried	-	trav	l miles velled h load	Total net ton miles	Averaş weigl carri	nt	d	Average listance per ton
	'000 tons		,	000	,000	tons			miles
Live animals		243		4, 680	14, 28	5	3.1		58.8
Food, feed, beverages and tobacco	3,	, 883		81,961	204, 64	2	2.5		52.7
Crude materials, inedible	15	,771		36,871	400,63	7	10.9		25.4
Fabricated materials, inedible	5	, 182		26,050	254, 04	3	9, 8		49.0
End products, inedible	1	,416		45,110	87, 24	5	1.9		61.6
General freight		885		16,227	40,99	9	2.5		46.3
Totals	27	, 380		210, 899	1, 001, 85	6	4.8		36. 6

#### SECTION II. TRAFFIC PERFORMED BY QUEBEC REGISTERED TRUCKS WITHIN THE PROVINCE JANUARY 1 - DECEMBER 31, 1964

TABLE 5. Total Operations (Intercity, Rural and Urban) of All Trucks

	70. 11.		Private		Motol .
	For hire	Intercity	Urban	Farm	Total
Mileage:					
	284, 243	475,800	829,534	115, 152	1,704,729
Total mileage travelled	15,800	12, 100	7,500	2, 900	8, 200
Revenue per mile (total mileage travelled) ¢	33.8	12, 100	1,000	2, 300	0,200
Revenue per mile (total mileage travened) ¢	55. 0				
Fuel:					
Total gallons of gasoline consumed	34, 139	45, 325	81,686	8,868	170,018
Miles per gallon of gasoline	6.8	10.1	9.9	13.0	9.5
Total gallons of diesel oil consumed	9,355	3, 231	4, 154		16,740
Miles per gallon of diesel oil	5.6	5.7	4.4		5.3
Total gallons of other fuel consumed	_	10	105	_	115
Miles per gallon of other fuel	-	5.5	2.6	-	8.5
Estimated annual population	18,000	39, 278	110,422	39,800	207,500

TABLE 5 A. Intercity and Rural Operations Only of For Hire, Private Intercity and Farm Trucks

		Priv	ate	
	For hire	Intercity	Farm	Total
Mileage:				
Total mileage travelled	284, 243	475,800 57.7	115, 152 74. 1	875, 195 30. 5
Weight of goods carried:				
Total tons of goods carried	18, 231	27, 283	1,808	47,322
Average weight carried ton	9.8	4.5	0.7	6.0
Average distance each ton was carried	66.0	33.0	11.6	44.9
Net ton miles:				
Total net ton miles performed '000	1, 203, 756	899,708	20,943	2, 124, 407
Average net ton miles per truck	66,900	22, 900	500	21, 900
Capacity ton miles:				
Total capacity ton miles <sup>2</sup> '000	2, 458, 185	2, 396, 658	139, 191	4,994,034
Average capacity ton miles per truck	136,600	61,000	3,500	51, 400
Percentage of capacity utilized	49.0	37.5	15.0	42.5
Gross ton miles:				
Total gross ton miles <sup>3</sup> '000	2,518,957	2, 467, 172	232, 357	5, 218, 486
Average gross ton miles per truck	139, 900	62,800	5,800	53, 800
Revenue:				
Total revenue \$'000	96, 110	_	_	_
Revenue per ton mile ¢	8.0	_		_
Average revenue per truck\$	5,300	_		-
Estimated annual population	18,000	39, 278	39, 800	97,078

See footnotes at end of Table 6 A, page 11.

Note: Table 5 A excludes the operations of vehicles in the urban category and the urban operations of for hire and private intercity vehicles (except mileage).

For further explanation of the difference between Table 5 and Table 5 A, see page 5, paragraph 6 of text.

TABLE 6. Total Operations (Intercity, Rural and Urban) of All Trucks by Gross Vehicle Weight Group

	0 - 2½ tons 0 - 5,000 lb.	2½-5 tons 5,001-10,000 lb.	5-7½ tons 10,001-15,000 lb.	7½-10 tons 15,001-20,000			Total
	10.	10.	10.	lb.	lb.	and over	
Mileage:							
Total mileage travelled'000	344, 922	678,045	115,023	114,600	175,395	276, 744	1,704,729
Average yearly mileage per truck	6,000	7,400	7, 600	8,900	11,300	17,900	8, 200
Fuel:							
B 10001							
Total gallons of gasoline consumed '000	24,461	57,658	12,667	14, 997	24, 946	35, 289	170,018
Miles per gallon of gasoline	14.1	11.8	9.0	7.6	6.9	5. 4	9.5
Total gallons of diesel oil consumed '000	89	_	121	_	281	16, 249	16,740
Miles per gallon of diesel oil	7.2	_	5.5	_	8.5	5.2	5. 3
Total gallons of other fuel consumed '000	-	_	_	_	_	115	115
Miles per gallon of other fuel	-	_	_	_	_	8.5	8. 5
Estimated annual population	57,476	91,042	15, 128	12, 827	15, 542	15, 485	207, 500

TABLE 6 A, Intercity and Rural Operations Only of For Hire, Private Intercity and Farm Trucks by Gross Vehicle Weight Group

	0-2½ tons 0-5,000 lb.	2½-5 tons 5,001-10,000 lb.	5-7½ tons 10,001-15,000 lb.	7½-10 tons 15,001-20,000 lb.	10-15 tons 20,001-30,000 lb.	Over 15 tons 30,001 lb. and over	Total
Mileage:							
Total mileage travelled	145,946	265, 173	55, 434	67, 463	125, 547	215,632	875, 195
Percentage of total mileage travelled empty	75.0	70.0	64.0	55. 4	49. 1	42. 4	30.5
Weight of goods carried:							
Total tons of goods carried	864	2,068	1, 183	3,405	10,805	28, 997	47,322
Average weight carried ton	0.3	0.6	2. 1	3.6	5.3	12.7	6.0
Average distance each ton was carried	13.4	23.3	35, 1	32. 1	31.4	54.3	44.9
Net ton miles:							
Total net ton miles performed	11,542	48, 285	41,523	109, 210	339, 597	1,574,250	2, 124, 407
Average net ton miles per truck	400	1,300	6, 200	17, 600	38,900	162,000	21, 900
Capacity ton miles:							
Total capacity ton miles <sup>2</sup> '000	107, 545	293,852	135, 176	261, 222	882,003	3, 314, 236	4, 994, 034
Average capacity ton miles per truck	3,800	7,800	20,000	42, 100	101, 100	341, 100	51, 400
Percentage of capacity utilized	10.7	16.4	30.7	41.8	38.5	47.5	42. 5
Gross ton miles:							
Total gross ton miles <sup>3</sup>	206, 249	489,031	157, 270	285,034	817, 952	3, 262, 950	5, 218, 486
Average gross ton miles per truck	7, 400	13,000	23,300	46,000	93, 800	335, 900	53,800
Estimated annual population	27, 985	37,707	6,750	6, 198	8,723	9,715	97,078

<sup>1</sup> Net ton miles divided by miles travelled with load.
2 Capacity ton miles are determined by multiplying the actual number of miles travelled by the estimated capacity or the weight of the heaviest load carried, whichever is larger.
5 Gross ton miles performed are determined by adding to the total ton miles performed the weight of the vehicle empty (tare) multiplied by total

miles travelled.

Note: Table 6 A excludes the operations of vehicles in the urban category and the urban operations of for hire and private intercity vehicles (except mileage).

For further explanation of the difference between Table 6 and Table 6 A, see page 5, paragraph 6 of text.

## SECTION III. INTERPROVINCIAL AND INTERNATIONAL TRAFFIC PERFORMED BY QUEBEC REGISTERED TRUCKS JANUARY 1- DECEMBER $31,\ 1964$

TABLE 7. Tons of Goods Carried by Province of Origin and Destination

		For hire		Pri	ivate interci	ty	Total				
Origin and destination	Into Quebec	Out of Quebec	Total	Into Quebec	Out of Quebec	Total	Into Quebec	Out of Quebec	Total		
	'000 tons										
Newfoundland	-	***	_	_	_	-	-	_	-		
Prince Edward Island	2	2	4	ann	_	-	2	2	4		
Nova Scotia	-	_	-	-	_	-	_	-	_		
New Brunswick	50	61	111	3	13	16	53	74	127		
Ontario	872	881	1,753	147	366	513	1,019	1,247	2,266		
Manitoba	39	38	77	_	_	_	39	38	77		
Saskatchewan	1	8	9		_	_	1	8	9		
Alberta	58	56	114	_	_		58	56	114		
British Columbia	8	6	14	_	_	_	8	6	14		
Yukon and Northwest Territories	-		-	-		_	-		-		
United States	125	273	398	93	125	218	218	398	616		
Totals	1, 155	1, 325	2, 480	243	504	747	1, 398	1,829	3, 227		

TABLE 8. Selected Statistics by Commodity Group

	1522 - 1 501										
	For hire										
Commodity group	goods trav		al miles velled th load	Total net ton miles		Average weight carried	Average distance per ton	Total revenue		Revenue per ton mile	
	'000 tons		,000	'000		tons	miles	\$,000		¢	
Live animals	13	496		4,756		9.6	371.9		243	5. 1	
Food, feed, beverages and tobacco	444	17,869		299,616		16.8	674.4		8,482	2.8	
Crude materials, inedible	173	3,246		53,278		16.4	16.4 308.0		1,882	3.5	
Fabricated materials, inedible	761	11,867		188,099		15.9	247.0		7,401	3.9	
End products, inedible	298		11,848	115,042		9.7	386.6	386.6		6.9	
General freight	791		27,367	417,577		15.3	527.9		3,685	3.3	
Totals	2, 480	72, 693		1, 078, 368		14. 8	434.8	3	9, 657	3. 7	
	Private intercity										
	Weight of goods carried		trav	Total miles travelled with load		Total net ton miles	Average weight carried		Average distance per ton		
	'000 tons	'000 tons		'000		,000	tons		miles		
Live animals		_		_		_		****		_	
Food, feed, beverages and tobacco		251		4,681		33,726		7.2		134.4	
Crude materials, inedible		267		1,705		28,617		16.8		107.0	
Fabricated materials, inedible		171		2, 123		36,603		17.2		214.5	
End products, inedible		48		2,833		17,657		6. 2		365.9	
General freight		10		266		1, 246		4.7		125.8	
Totals		747		11, 608		117, 849		10. 2		157.7	

APPENDIX
Estimated Quebec Truck Population

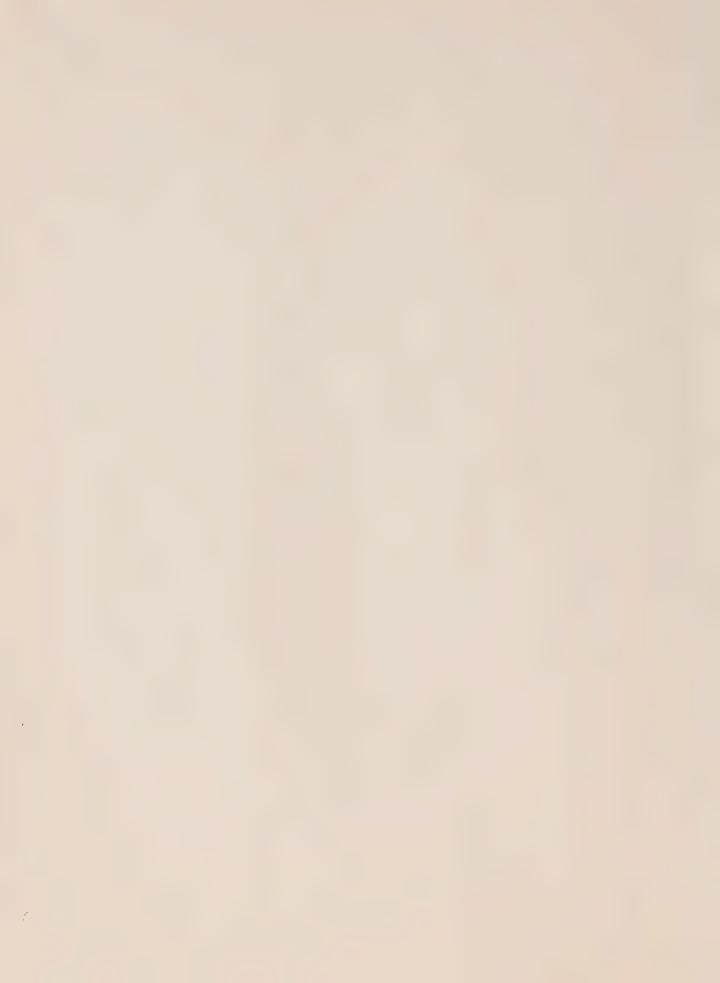
Type of operation	0-2½ tons 0-5,000 1b.	2½-5 tons 5,001-10,000 lb.	5-7½ tons 10,001-15,000 lb.	7½-10 tons 15,001-20,000 1b.	10-15 tons 20,001-30,000 lb.	Over 15 tons 30,001 lb. and over	Total
For hire	755	2,651	2,006	2,768	4,001	5,819	18,000
Intercity	10,145	15,046	2,748	2,772	4,673	3,894	39, 278
Urban	29,491	53, 335	8,378	6,629	6,819	5,770	110,422
Farm	17,085	20,010	1,996	658	49	2	39,800
Totals	57, 476	91, 042	15, 128	12,827	15, 542	15, 485	207, 500















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